

EL MOTAMYEZ - SCIENCE Questions Bank

FINAL REVISION

Question 01

Choose the correct answers

- 1 Photosynthesis process take place inside
 (a) roots (b) stem (c) leaves (d) Flowers
- 2 The transports water and nutrients from roots to leave
 (a) Stem (b) root hair (c) seed (d) flower
- 3 The system in humans that moves blood in human body is called.....
 (a) digestive (b) respiratory (c) Circulatory (d) nervous
- 4 Plants with sticky seeds need..... to stick to disperse
 (a) air (b) body of a living organism (c) water (d) light energy from the sun
- 5 Plants and humans are similar in some of their basic needs to survive such as.....
 (a) sunlight and rocks (b) carbon dioxide and soil. (c) water and air (d) soil and water
- 6 Flower produce..... for reproduction
 (a) leaves (b) stem (c) seeds (d) roots
- 7 carry/carries blood from the heart to all the body parts.
 (a) Arteries (b) Veins (c) Lungs (d) Phloem
- 8 carry blood rich in carbon dioxide
 (a) arteries (b) veins (c) lungs (d) xylem
- 9 All the flowing substance are not important for plant growth except
 (a) rocks (b) insect (c) air (d) animal
- 10 All the following structures exist in green plants, except.....
 (a) Stems (b) fruits. (c) blood (d) leaves
- 11 The human circulatory system includes all the following structures, except.....
 (a) Heart (b) vein (c) artery (d) lungs
- 12energy change into chemical energy during photosynthesis process.
 light thermal electrical magnetic



- 13 The.....is the reproductive part of the plant
 (a) flower (b) stem (c) leaves (d) roots
- 14 Plants can produce new seeds by
 (a) roots (b) leaves (c) flowers (d) stems
- 15 plant has climb stems
 (a) Potato (b) Tomato (c) Vine (d) pine
- 16 Leaves of green plants absorb the sunlight to combine water with to produce their own food.
 (a) oxygen gas (b) soil (c) carbon dioxide (d) roots
- 17 In photosynthesis process, plant produces to get energy.
 (a) Oxygen gas (b) sugar (c) carbon dioxide gas (d) water
- 18 All the following are from the plant basic needs except
 (a) water (b) air (c) soil (d) sunlight
- 19 When the plant seed begins to grow and makes sprouts this process is called
 (a) respiration (b) germination (c) absorption (d) reproduction
- 20 Water and nutrient transport from roots to the leaves of plant by.....
 (a) Xylem (b) Phloem (c) Chlorophyll (d) Stomata
- 21 The..... of plant get water and nutrients from the soil.
 (a) roots (b) stems (c) leaves (d) soil
- 22 Plants takegas from the air to make its food.
 (a) water (b) oxygen gas (c) carbon dioxide (d) sugar
- 23 What parts of the plant transport food from the leaves to the other parts of the plant?
 (a) xylem tissue (b) small roots (c) chloroplast (d) phloem
- 24 Without plant can't grow.
 (a) Insect. (b) Rocks (c) Sun light (d) Moon light.
- 25 Dandelion seeds are light and feathery that are able to disperse by
 (a) water (b) air (c) animals (d) phloem
- 26 The kind of stems that extend underground are called.....
 (a) climb stems (b) tubers (c) runners (d) wood stems



- 27 In plant's leaves, light energy is converted into..... energy during photosynthesis
 (a) chemical (b) sound (c) electric (d) kinetic
- 28 All the following can help in seed dispersal, except.....
 (a) wind (b) water (c) Human - animals (d) soil - sunlight
- 29 Which of the following living organisms can make their own food?
 (a) Hawks (b) Mice (c) Pine tree (d) Caracals
- 30 The food chain always starts with
 (a) producers (b) consumers (c) decomposers (d) predators
- 31 is from non-living part of ecosystem.
 (a) fungi (b) plant (c) soil (d) grasshopper
- 32 Lion is from
 (a) producers (b) grass eaters (c) meat eaters (d) decomposers
- 33 Allneed a source of energy.
 (a) Oceans (b) Metals (c) Rocks (d) living things
- 34 Plants are from that get their energy from the sun to produce their food
 (a) decomposer (b) consumers (c) Producers (d) non-living things
- 35 The predator in food web is.....
 (a) producers (b) consumers (c) decomposers (d) plants
- 36 When a rabbit dies in the desert, its body will.....
 (a) Grow (b) stay (c) freeze (d) decompose
- 37 A community that includes living organisms and non-living things known as
 (a) digestive system (b) respiratory system (c) ecosystem (d) circulatory system
- 38 Organisms that eat other living organisms to get their energy because they can't make their food are called
 (a) producers (b) consumers (c) decomposers (d) plants
- 39 A snake is predator for mice, while snake is considered as a prey for
 (a) rabbit (b) frog (c) eagle (d) deer
- 40 Human is a living organism
 (a) producer (b) consumer (c) decomposer (d) prey



- 41 Hawk eats a rabbit to get energy, this means that.....
 (a) hawk is prey. (b) rabbit is predator (c) hawk is predator (d) hawk, rabbit are predators
- 42 An ecosystem consists of
 (a) living organisms only (b) non-living things only (c) Living , non-living (d) No correct answer
- 43 All the following are decomposers except.....
 (a) Grasses (b) Fungi (c) Bacteria (d) Millipeds
- 44 The process which happens to all dead organisms is known as
 (a) Photosynthesis (b) breathing (c) decomposition (d) digestion
- 45 Decomposers always..... the soil
 (a) pollute (b) damage (c) benefit (d) harm
- 46 If there are no predators in an ecosystem, the other consumers will
 (a) die (b) not affected (c) increase (d) decrease
- 47 is the living organism that eat plant.
 (a) Primary consumer (b) Producer (c) Tertiary consumer (d) Secondary consumer
- 48 What organisms depend on other organisms for their food?
 (a) rabbit (b) cactus (c) flower (d) acacia tree
- 49 The primary source of energy for all living organisms on the Earth, is.....
 (a) the Sun (b) green plants. (c) glucose sugar (d) photosynthesis process
- 50is an area in the ocean where the small pieces of coral are nurtured.
 (a) Population (b) Nursery (c) Protectorate (d) Garden
- 51 As a result of coral reefs bleaching, they will be
 (a) increased (b) enlarged (c) survived (d) died
- 52 Decomposers play an important role in returning the energy back to all the following, except the
 (a) air (b) soil (c) water (d) decomposer
- 53 If the climate change suitable: the population of species will.....
 (a) die (b) increase (c) decrease (d) be constant
- 54 Marine microorganisms are
 (a) Producer (b) Consumer (c) Decomposer (d) Predator



- 55 When the water is warm, the coral turns..... color
 (a) Red (b) Black (c) Green (d) White
- 56 Secondary consumers can eat
 (a) decomposers (b) producers (c) primary consumers (d) tertiary consumers
- 57 Any marine food chain doesn't include
 (a) algae (b) zooplankton (c) tiger (d) algae
- 58 The marine food web usually started with
 (a) clam (b) algae (c) zooplankton (d) parrotfish
- 59 As the result of pollution in an ecosystem, the number of living organisms.....
 (a) decreases (b) increases (c) doesn't change (d) is doubled
- 60 The particles are packed tightly with each other is
 (a) water (b) iron (c) oxygen (d) all the previous
- 61 Which matter has no definite shape, definite volume.....
 (a) Wood (b) ice (c) Oil (d) water vapor
- 62 According to hardness feathers are.....
 (a) soft (b) hard (c) round (d) square
- 63 The amount of space that matter takes up is called.
 (a) volume (b) matter (c) mass (d) temperature
- 64 Ice is an example of..... state of water
 (a) solid (b) gas (c) liquid (d) a,b
- 65 During the eruption oflava come out
 (a) star (b) volcano (c) wooden piece (d) plastic piece
- 66is an example of gas matter.
 (a) Air (b) Water (c) Milk (d) Book
- 67 Matter has..... state(s).
 (a) one (b) two (c) three (d) four
- 68 Water can be found in a solid state in the form of a
 (a) steam (b) ice (c) sea water (d) cold water
- 69 An example of gas is.....
 (a) Water (b) Rock (c) pencil (d) Oxygen



- 70 All matter is made of
 (a) molecules (b) proteins (c) cells (d) atoms
- 71 The measuring unit of mass is.....
 (a) litter (b) gram (c) cm (d) ml
- 72 From an example of matter that attract to magnet is
 (a) cork (b) iron (c) wood (d) plastic
- 73 The measuring unit of volume.....
 (a) cm (b) gram (c) cm^3 (d) kg
- 74 Thermometers can be used to know the of water.
 (a) shape (b) color (c) temperature (d) weight
- 75 All the following are measuring unit of volume except.....
 (a) liters (b) milliliters (c) cm^3 (d) kilogram
- 76 is a property that shows if an object floats or sinks in another matter
 (a) Color (b) Odor (c) Shape (d) Density
- 77 Roofs are used to protect us from
 (a) dust and dirt (b) entering rain water (c) a, b (d) no correct answer
- 78 All the following from the physical properties of matter, except
 (a) Color (b) shape (c) ability to burn (d) temperature
- 79 We can differentiate between vinegar and perfume using
 (a) color (b) shape (c) texture (d) odor
- 80 A non-flammable gas that used to fill balloons is
 (a) hydrogen (b) helium (c) oxygen (d) water vapor
- 81 A book length or width can be measured using
 (a) ruler (b) thermometer (c) scale (d) measuring cup
- 82 is considered as a chemical change
 (a) cutting vegetables (b) boiling water (c) Rusting iron (d) melting of chocolate
- 83 All the following are chemical changes, except
 (a) digestion of food (b) burning (c) iron rust (d) cutting Cloth
- 84 On increasing the temperature of water (heating), it
 (a) freezes (b) melts (c) condenses (d) evaporates



- 85 is an example of the physical changes.
 (a) Iron rust (b) Rot of fruit (c) condensation (d) Making bread
- 86 When the water temperature decreases, water changes into
 (a) ice (b) water vapor (c) steam (d) a,b,c
- 87 Which of the following are examples of mixture?
 (a) sand and rock (b) ocean water (c) Atmosphere (d) a,b,c
- 88 When water evaporates, it changes fromstate to state.
 (a) solid to liquid (b) liquid to gas (c) a gas to liquid (d) liquid to solid
- 89 The change of matter from a gas state to a liquid state is called
 (a) evaporation (b) condensation (c) freezing (d) melting
- 90 The change of matter from a liquid state to a solid state is called
 (a) evaporation (b) condensation (c) freezing (d) melting

Question 02

PUT (√) OR (×)

- 1 The transport system of plant does the same function of circulatory system in human. ()
- 2 Xylem vessels transport water and minerals in all directions. ()
- 3 Light is important for plant growth. ()
- 4 The plant absorbs carbon dioxide from the air to make its own food. ()
- 5 Plant's stem has hairs that absorb oxygen gas from the air. ()
- 6 Soil is among the basic needs of a plant. ()
- 7 Seeds with good taste can be eaten and dispersed by animals. ()
- 8 Sunlight is not important for the plant's growth. ()
- 9 Plants and humans are similar in the way of getting food. ()
- 10 Decomposers don't have a role in the ecosystem ()
- 11 The first link in any food chain is a consumer ()
- 12 The formation of water droplets on plant leaves due to the condensation process ()
- 13 Hawks, crocodiles and sharks are predators. ()
- 14 Human can eat plants and animals. ()
- 15 Producers and consumers use carbon dioxide gas for making their food ()



- 16 Habitat loss is one of the main causes of extinction ()
- 17 Climate changes, pollution and human activities affect Ecosystem ()
- 18 If coral reefs are destroyed, many marine food chains will be destroyed ()
- 19 A desert food chain doesn't contain any type of fish. ()
- 20 The death of microorganism affects the sea birds ()
- 21 Milk is considered the solid state of matter ()
- 22 Microplastic is a suitable food for many marine organisms ()
- 23 The roof of desert home is similar to rainforest home ()
- 24 The atmosphere is a mixture of many gases. ()
- 25 Glass is a transparent material used in making eye glass ()
- 26 Measuring cup is used to measure the length of the object ()
- 27 Glass used to make tires because it is flexible. ()
- 28 When a wooden cube is placed in a glass of water, it will float ()
- 29 The length of a box can be measured in liters ()
- 30 We can differentiate between iron and copper by taste. ()
- 31 Copper can be stretched into a thin flexible wire. ()
- 32 The matter changes from one state to other by increasing or decreasing of temperature ()
- 33 When we burn a piece of paper, a new substance is formed ()
- 34 Ocean water is a mixture because it consists of water, dissolved salts, and other materials. ()
- 35 When we decrease the water temperature it evaporates ()
- 36 Chemical change is reversible, because the substance doesn't change ()
- 37 Freezing is the change of matter from a solid state to a liquid state ()
- 38 The total number of particles in the matter doesn't change by changing the state of matter. ()
- 39 The amount of matter doesn't change when it changes from one state to another ()



Question 03

Complete the following sentences using words between brackets

- ① Plants are that get energy from the sunlight to make their own food.
(Decomposers - producers)
- ② is a miniature plant waiting for the suitable conditions to grow
(Seed – leaves)
- ③ consume the remains of dead animals and plants.
(Consumers - Decomposers)
- ④ The captures sunlight to help the plant do photosynthesis.
(chlorophyll - flower)
- ⑤ Any food chain begins with producers and ends with
(producers - decomposers)
- ⑥ In longer food chains, are classified into primary, secondary and tertiary. (producers - consumers)
- ⑦ The amount of energy that transfers between living organisms in food web is.....(10% - 90%)
- ⑧ model used to study very large things (germs - solar system)
- ⑨ Coral bleaching occurs at..... (High temperature - low temperature)
- ⑩ Heavy rains may..... the desert ecosystem . (improve - destroy)
- ⑪ Rabbits die quickly when disappear from ecosystem . (Hawks - Grasses)
- ⑫ Plastic products are broken into smaller pieces because of rays.
(water waves -Ultra Violet)
- ⑬ State of mater that has definite shape and volume is..... (solid-liquid)
- ⑭ The particles of gaseous state move.....(freely - slowly)
- ⑮ The movement of water particles are slower than that of (Wood- oxygen)
- ⑯ Which of the following matter has a no definite volume and shape?
(Ice - Air)
- ⑰ Water takes theof its container (shape -volume)
- ⑱ is used to measure the mass of objects (measuring cup – balance)
- ⑲ Steel is used in making hammers, because it is.....(hard – soft)
- ⑳ liquids have shape. (definite - no definite)



- 21 When temperature of ice increase its particles (move slower - move faster)
- 22 process used to separate salt from salty water
(Evaporation - Filtration)
- 23process used to separate sand from water (filtration – evaporation)

Question 04**Complete The Following Sentences**

- 1are small vessels in the plant that transport water and nutrients to other parts of plant.
- 2 Burdock seeds can stick to animal fur because they have
- 3 Plants take from air to make its food.
- 4 Plants make their own food duringprocess
- 5produce seeds for the plant reproduction.
- 6of plant absorbs water and nutrients from the soil.
- 7 Veins carry blood rich ingas.
- 8are narrow holes in plant's leaves.
- 9 Inside the green plant, sunlight allows carbon dioxide to combine withthat is absorbed from the soil by plant's root.
- 10 The food of plant is a type ofwhich is made in their leaves by photosynthesis process.
- 11 Different plants have three main common structures which are roots,and
- 12 Both humans and animals cannot produce their own
- 13 Plants produceandduring photosynthesis process.
- 14 Decomposition process takes place on land as well as under
- 15 Bread mold and mushroom are two types of
- 16 In a food chain, the energy flows fromconsumer to a secondary consumer
- 17 Sea birds feed on
- 18 Frog eats an insect that feeds on plants, this means that frog is aconsumers.
- 19 Some marine animals can not differ between food and plastic as



- 20 In a marine habitat micro plastic could be ingested by theand this process harms it.
- 21 Secondary consumers feed on
- 22 The human activity that decrease the marine population is
- 23 Plastic products get broken into small particles by the effect of
- 24 A process of returning habitat to its natural state is called
- 25 Heavy rain causeswhich destroys desert ecosystems.
- 26 Gaseous particles move
- 27anything that has mass and take up space.
- 28 Water vapor is an example forstate
- 29 Any matter is made up of millions of tinythat we can't see with our eyes
- 30 In thematter, the volume and shape don't change
- 31 The particles ofmatter have a lot of energy
- 32 You can use a ruler to measure the.....of your book
- 33 Copper is used to makeand
- 34 1 kilogram =grams.
- 35 Gram is the measuring unit of
- 36 Volume is the amount ofthat matter takes up
- 37 Thermometer is used to measure
- 38 Matter hasand
- 39 Cutting a piece of paper is achange, while burn a piece of paper is achange
- 40 When the temperature of water rises, water particles speed will
- 41 Melting is the change of a matter from astate to astate by
- 42 Atmosphere is a mixture because it consists of different gases as , ,
- 43 iron rusting is considered as achange.
- 44 The boiling of water to water vapor is consideredchange



Question 05

Write the scientific term for each of the following

- ① The part of the plant that is responsible for making its food ()
- ② Parts of plant that fix the plant in the soil. ()
- ③ It is found in plant's leaves gives them green color and absorbs energy from the sun ()
- ④ The transfer of seeds from one place to another. ()
- ⑤ It is a model that shows one linear set of feeding relationships and energy flow between living organisms ()
- ⑥ Blood vessels carry oxygenated blood from heart to all body parts. ()
- ⑦ The system that transports blood throughout the human body. ()
- ⑧ The process by which plants make their own food by using the energy of sunlight. ()
- ⑨ The gas that plant needs to make photosynthesis process ()
- ⑩ The primary source of energy for all organisms on earth ()
- ⑪ Tubes in the plant that transport food materials from the leaves to other parts of plant. ()
- ⑫ Vessels in plant through which water and nutrients move up from roots to leaves. ()
- ⑬ Narrow holes spread on the plant's leaves that allow gases to come in and out the plant ()
- ⑭ The plant part that supports it and holds the leaves ()
- ⑮ Parts of the plant that are responsible for reproduction. ()
- ⑯ A gas produced during photosynthesis and is needed for respiration of living organisms. ()
- ⑰ It is the number of organisms of one type of species living in an area. ()
- ⑱ It is a process through which decomposers can recycle elements back into the soil ()
- ⑲ A group of interconnected food chains ()



- 20 The animal that is eaten by another animal ()
- 21 An area (community) that contain living organisms and non-living things ()
- 22 They are organisms that break down the bodies of dead animals into small pieces. ()
- 23 It is a process through which humans can make new products from waste materials ()
- 24 They are animals that eat plants ()
- 25 A group of living organisms that can produce their own food. ()
- 26 The consumer that hunts and eats another animal. ()
- 27 It is a copy that is similar to the real thing ()
- 28 They are consumers that exist at the top of food chains. ()
- 29 It is an area in the sea where scientists take care of small pieces of coral until they grow up ()
- 30 A model of the whole world that is made in the shape of a large ball. ()
- 31 Flying living organisms that build their nests on the top of mountain cliffs and feed on small fish ()
- 32 The corals turn completely into white ()
- 33 A human activity that affects marine food webs and cause decreasing the number of fish ()
- 34 Small pieces of plastics in size of rice grains and they cause harms to marine organisms ()
- 35 The process of returning a habitat back to its natural state. ()
- 36 It is a temperature at which matter changes from liquid to solid ()
- 37 The state of water after its freezing. ()
- 38 Anything has mass and volume ()
- 39 The state of matter that has fixed shape and volume. ()
- 40 A tool is used to measure the length of wall or room ()



- 41 The building unit of matter. ()
- 42 It is a measure of the amount of matter. ()
- 43 A tool (device) used to see tiny particle such as a germs ()
- 44 The state of water when its temperature between 0°C to 100°C ()
- 45 The formation of a flaky reddish layer of iron oxide occurs when iron reacts with oxygen ()
- 46 It is a type of energy we get from the sun used in warming house and cooking food ()
- 47 It is a change in matter with a change in its structure producing a new substance ()
- 48 The state of water after heating for high temperature. ()
- 49 The state of matter that keep its shape and its particles packed tightly ()
- 50 The ability of materials to transfer heat and conduct electricity ()
- 51 A device that is used to measure the volume of liquids ()
- 52 Is everything around us that has a mass and takes a space. ()
- 53 They are the properties that can be observed or measured without any change in the matter ()
- 54 It is a process by which a matter is changed from solid to liquid state. ()
- 55 They are changes in matter which are usually reversible and don't affect its structure. ()
- 56 It is the process by which matter changes from liquid state to gas state. ()
- 57 It is the process by which matter changes from gas state to liquid state ()

Question 06**Give reason for each of the following**

- 1 Green plants can make their own food. (Plants are producers)
.....
- 2 There are stomata in the plant leaves.
.....



- 3 Burdock seeds can stick to animal fur.
.....
- 4 Human needs to eat some animals and plants.
.....
- 5 Seeds of maple or dandelion plants can disperse through wind easily.
.....
- 6 Roots are important to plants.
.....
- 7 There are tubes called phloem inside the plant.
.....
- 8 Chlorophyll in plant's leaves has an important role in photosynthesis process.
.....
- 9 Plants are very important for other living organisms.
.....
- 10 Sun light is important for all living organisms
.....
- 11 Importance of healthy habitat for all living organisms
.....
- 12 Gentle rains cause a healthy ecosystem.
.....
- 13 Air is matter - Book is matter – salt is matter
.....
- 14 Wood is solid matter
.....
- 15 Brick differs from feather. (According to their hardness).
.....
- 16 When you blow the air inside a balloon, the air takes the shape of it.
.....
- 17 Desert ecosystem contains few members of primary consumers
.....
- 18 It is safe to use helium gas
.....
- 19 Helium gas used to fill balloons and blimps
.....



- 20 Copper is used to make cooking pots
.....
- 21 Melting and freezing are considered as a physical changes.
.....
- 22 Ice change into water when it left out of refrigerator
.....
- 23 Ice melt when the temperature increases
.....
- 24 Burning of wood is considered a chemical change.
.....

Question 07

What happens If ?

- 1 A plant is placed in a dark place (isn't exposed to sunlight for a few days.)
.....
- 2 We put a seed of bean in a soil.
.....
- 3 Plants have no stems.
.....
- 4 Plant's leaves don't contain chlorophyll.
.....
- 5 There is no decomposition process done on the Earth.
.....
- 6 Coral reefs when water temperatures rise.
.....
- 7 When temperature of water contain microorganisms increases
.....
- 8 The number of one species increases a lot. (Concerning food resources).
.....
- 9 When small lakes exposed to extreme hot climate
.....



- 10 The number of secondary consumer decrease in an ecosystem
.....
- 11 Bleaching of coral reefs.
.....
- 12 Leave a piece of iron exposed to wet air.
.....
- 13 Ultraviolet rays fall on the plastic that present in sea
.....
- 14 Heavy rains fall on the desert
.....
- 15 Melting of ice. (Related to the change in its state)
.....
- 16 When ice cubes exposed to heat (concerning the state and the speed of melting)
.....
- 17 We add yeast to doughs (pastry)
.....
- 18 We leave ice out of freezer.
.....

Question 08**cross the odd word**

- 1 Carbon dioxide gas - Water - Oxygen gas - Sunlight
- 2 Roots - Stems - Leaves - Sunlight
- 3 green plant - shelter - water - sun light
- 4 Arteries - blood - veins - stomata
- 5 Foxes - lions - tiger - rabbits
- 6 Eagle - Hawk - Rabbit - Crocodile
- 7 Bacteria - Rabbit - mouse - bird
- 8 Fox - Eagle - Clam - Rabbit
- 9 Lion - deer - Moon - Grass
- 10 Fungi - Bacteria - Plants - Earthworm
- 11 water - oil - light - alcohol



- 12 plastic - iron - aluminium – vinegar
- 13 water-milk-sand
- 14 sound – light – ice

Question 09

Complete the following using words between brackets

1**(coconut - primary - producer - carbon dioxide)**

- 1 living organisms including consumer and decomposer.
- 2 In photosynthesis process, green plants gets gas from air to make its food.
- 3 In food chain energy flow forms consumer to secondary consumer.
- 4 The seed that can be transported by float on water as

2**(roots - xylem - leaves - phloem)**

- 1 Water and nutrients move up in plants through
- 2 Stomata are tiny pores on the surface of plant that allow gases to move into and out of plant.
- 3 The of plant absorb water from the soil.
- 4 is a tubes carry sugars from the leaves to all plant parts.

3**(Fungi – stomata – roots – stem - spines)**

- 1 The of plant absorb water and nutrients from the soil.
- 2 Gases enter the plant through
- 3 Burdock seeds have to stick to animal fur.
- 4 is an example of decomposers.

4**(sunlight - lion - rabbit - circulatory system)**

- 1 is a predator animal.
- 2 In Photosynthesis process plant use to make food.
- 3 is the system that transports blood throughout the human body.
- 4 is a primary consumer.



5

(energy -pollution – sea birds – coral bleaching)

- ① When water temperatures rise happens
- ② Throwing plastic wastes into a river causes water
- ③ When predator feed on prey, predator get from prey
- ④ dive deep down into the sea to feed on small fish

6

(Phloem – bacteria and fungi – measuring tape – melts – balance – evaporates)

- ① One example of decomposers is
- ② transports the glucose from the leaves to other parts of plants.
- ③ When ice, it will change from solid state to liquid one.
- ④ We can measure the length of classroom by using

7

(Model – physical – chemical – imbalance – producers – decomposers)

- ① When a drought occurs in a lake, it causesin ecosystem.
- ② The get the energy from sunlight.
- ③ Iron rust and burning reactions are from change.
- ④ is a copy that is similar to real thing to show what it looks like or work like.

Question 10

Answer the following questions

- ① What are the main parts of plant?
.....
- ② Mention two methods of seed dispersal
.....
- ③ Explain (The plants are the first link in any food chain)
.....
- ④ What is the reason for coral bleaching?
.....
- ⑤ What are the reasons of losing habitat?
.....



6

Mention one of the human activities that affect the marine environment

.....

7

Use the following words to form a food chain:

a- bird -insect- grass -snake

.....

b- Hawk - Grasses - Rat - Snake

.....

c- Shark- Algae - sea star- Clam

.....

d- small fish - seabirds -bacteria - micro-organisms floating on the surface of the sea

.....

8

Study the following food chain then complete the sentences below:-

Plant → Rabbit → Hawk → Bacteria.

a- The is a producer.

b- The is a secondary consumer.

c. The is a first consumer in this food chain

d. bacteria is a

انتهت الأسئلة مع اطيب الامنيات بالنجاح والتوفيق



بنك أسئلة

الصف
الخامس
الابتدائي
٢٠٢٣

التميز

أ/ محمود سعيد



Model Answer

Science

Final revision

By

Mrs. Amira Ahmed



cartoon science

5

الصف
الخامس



El.Motamyez.School

يمكنكم الحصول على المذكرات والاختبارات من خلال مسح رمز ال QR Code
أو من خلال صفحة "التميز - أ/ محمود سعيد".
يرجى مراعاة حقوق صاحب المحتوى عند النشر.

EL MOTAMYEZ - SCIENCE Questions Bank

FINAL REVISION

Question 01

Choose the correct answers

- 1 Photosynthesis process take place inside
 (a) roots (b) stem (c) **leaves** (d) Flowers
- 2 The transports water and nutrients from roots to leave
 (a) **Stem** (b) root hair (c) seed (d) flower
- 3 The system in humans that moves blood in human body is called.....
 (a) digestive (b) respiratory (c) **Circulatory** (d) nervous
- 4 Plants with sticky seeds need..... to stick to disperse
 (a) air (b) **body of a living organism** (c) water (d) light energy from the sun
- 5 Plants and humans are similar in some of their basic needs to survive such as.....
 (a) sunlight and rocks (b) carbon dioxide and soil. (c) **water and air** (d) soil and water
- 6 Flower produce..... for reproduction
 (a) leaves (b) stem (c) **seeds** (d) roots
- 7 carry/carries blood from the heart to all the body parts.
 (a) **Arteries** (b) Veins (c) Lungs (d) Phloem
- 8 carry blood rich in carbon dioxide
 (a) arteries (b) **veins** (c) lungs (d) xylem
- 9 All the flowing substance are not important for plant growth except
 (a) rocks (b) insect (c) **air** (d) animal
- 10 All the following structures exist in green plants, except.....
 (a) Stems (b) fruits. (c) **blood** (d) leaves
- 11 The human circulatory system includes all the following structures, except.....
 (a) Heart (b) vein (c) artery (d) **lungs**
- 12energy change into chemical energy during photosynthesis process.
light thermal electrical magnetic



- 13 The.....is the reproductive part of the plant
 (a) **flower** (b) stem (c) leaves (d) roots
- 14 Plants can produce new seeds by
 (a) roots (b) leaves (c) **flowers** (d) stems
- 15 plant has climb stems
 (a) Potato (b) Tomato (c) **Vine** (d) pine
- 16 Leaves of green plants absorb the sunlight to combine water with to produce their own food.
 (a) oxygen gas (b) soil (c) **carbon dioxide** (d) roots
- 17 In photosynthesis process, plant produces to get energy.
 (a) Oxygen gas (b) **sugar** (c) carbon dioxide gas (d) water
- 18 All the following are from the plant basic needs except
 (a) water (b) air (c) **soil** (d) sunlight
- 19 When the plant seed begins to grow and makes sprouts this process is called
 (a) respiration (b) **germination** (c) absorption (d) reproduction
- 20 Water and nutrient transport from roots to the leaves of plant by.....
 (a) **Xylem** (b) Phloem (c) Chlorophyll (d) Stomata
- 21 The..... of plant get water and nutrients from the soil.
 (a) **roots** (b) stems (c) leaves (d) soil
- 22 Plants takegas from the air to make its food.
 (a) water (b) oxygen gas (c) **carbon dioxide** (d) sugar
- 23 What parts of the plant transport food from the leaves to the other parts of the plant?
 (a) xylem tissue (b) small roots (c) chloroplast (d) **phloem**
- 24 Without plant can't grow.
 (a) Insect. (b) Rocks (c) **Sun light** (d) Moon light.
- 25 Dandelion seeds are light and feathery that are able to disperse by
 (a) water (b) **air** (c) animals (d) phloem
- 26 The kind of stems that extend underground are called.....
 (a) climb stems (b) **tubers** (c) runners (d) wood stems





- 27 In plant's leaves, light energy is converted into..... energy during photosynthesis
 (a) **chemical** (b) sound (c) electric (d) kinetic
- 28 All the following can help in seed dispersal, except.....
 (a) wind (b) water (c) Human - animals (d) **soil - sunlight**
- 29 Which of the following living organisms can make their own food?
 (a) **Hawks** (b) Mice (c) **Pine tree** (d) Caracals
- 30 The food chain always starts with
 (a) **producers** (b) consumers (c) decomposers (d) predators
- 31 is from non-living part of ecosystem.
 (a) fungi (b) plant (c) **soil** (d) grasshopper
- 32 Lion is from
 (a) producers (b) grass eaters (c) **meat eaters** (d) decomposers
- 33 Allneed a source of energy.
 (a) Oceans (b) Metals (c) Rocks (d) **living things**
- 34 Plants are from that get their energy from the sun to produce their food
 (a) decomposer (b) consumers (c) **Producers** (d) non-living things
- 35 The predator in food web is.....
 (a) producers (b) **consumers** (c) decomposers (d) plants
- 36 When a rabbit dies in the desert, its body will.....
 (a) Grow (b) stay (c) freeze (d) **decompose**
- 37 A community that includes living organisms and non-living things known as
 (a) digestive system (b) respiratory system (c) **ecosystem** (d) circulatory system
- 38 Organisms that eat other living organisms to get their energy because they can't make their food are called
 (a) producers (b) **consumers** (c) decomposers (d) plants
- 39 A snake is predator for mice, while snake is considered as a prey for
 (a) rabbit (b) frog (c) **eagle** (d) deer
- 40 Human is a living organism
 (a) producer (b) **consumer** (c) decomposer (d) prey



- 41 Hawk eats a rabbit to get energy, this means that.....
 (a) hawk is prey. (b) rabbit is predator (c) **hawk is predator** (d) hawk, rabbit are predators
- 42 An ecosystem consists of
 (a) living organisms only (b) non-living things only (c) **Living, non-living** (d) No correct answer
- 43 All the following are decomposers except.....
 (a) **Grasses** (b) Fungi (c) Bacteria (d) Millipeds
- 44 The process which happens to all dead organisms is known as
 (a) Photosynthesis (b) breathing (c) **decomposition** (d) digestion
- 45 Decomposers always..... the soil
 (a) pollute (b) damage (c) **benefit** (d) harm
- 46 If there are no predators in an ecosystem, the other consumers will
 (a) die (b) not affected (c) **increase** (d) decrease
- 47 is the living organism that eat plant.
 (a) **Primary consumer** (b) Producer (c) Tertiary consumer (d) Secondary consumer
- 48 What organisms depend on other organisms for their food?
 (a) **rabbit** (b) cactus (c) flower (d) acacia tree
- 49 The primary source of energy for all living organisms on the Earth, is.....
 (a) **the Sun** (b) green plants. (c) glucose sugar (d) photosynthesis process
- 50is an area in the ocean where the small pieces of coral are nurtured.
 (a) Population (b) **Nursery** (c) Protectorate (d) Garden
- 51 As a result of coral reefs bleaching, they will be
 (a) increased (b) enlarged (c) survived (d) **died**
- 52 Decomposers play an important role in returning the energy back to all the following, except the
 (a) air (b) soil (c) water (d) **decomposer**
- 53 If the climate change suitable: the population of species will.....
 (a) die (b) **increase** (c) decrease (d) be constant
- 54 Marine microorganisms are
 (a) **Producer** (b) Consumer (c) Decomposer (d) Predator



- 55 When the water is warm, the coral turns..... color
 (a) Red (b) Black (c) Green (d) **White**
- 56 Secondary consumers can eat
 (a) decomposers (b) producers (c) **primary consumers** (d) tertiary consumers
- 57 Any marine food chain doesn't include
 (a) algae (b) zooplankton (c) **tiger** (d) algae
- 58 The marine food web usually started with
 (a) clam (b) **algae** (c) zooplankton (d) parrotfish
- 59 As the result of pollution in an ecosystem, the number of living organisms.....
 (a) **decreases** (b) increases (c) doesn't change (d) is doubled
- 60 The particles are packed tightly with each other is
 (a) **water** (b) **iron** (c) oxygen (d) all the previous
- 61 Which matter has no definite shape, definite volume.....
 (a) Wood (b) ice (c) **Oil** (d) water vapor
- 62 According to hardness feathers are.....
 (a) **soft** (b) hard (c) round (d) square
- 63 The amount of space that matter takes up is called.
 (a) **volume** (b) matter (c) mass (d) temperature
- 64 Ice is an example of..... state of water
 (a) **solid** (b) gas (c) liquid (d) a,b
- 65 During the eruption oflava come out
 (a) star (b) **volcano** (c) wooden piece (d) plastic piece
- 66is an example of gas matter.
 (a) **Air** (b) Water (c) Milk (d) Book
- 67 Matter has..... state(s).
 (a) one (b) two (c) **three** (d) four
- 68 Water can be found in a solid state in the form of a
 (a) steam (b) **ice** (c) sea water (d) cold water
- 69 An example of gas is.....
 (a) Water (b) Rock (c) pencil (d) **Oxygen**



- 70 All matter is made of
 (a) **molecules** (b) proteins (c) cells (d) atoms
- 71 The measuring unit of mass is.....
 (a) litter (b) **gram** (c) cm (d) ml
- 72 From an example of matter that attract to magnet is
 (a) cork (b) **iron** (c) wood (d) plastic
- 73 The measuring unit of volume.....
 (a) cm (b) gram (c) **cm³** (d) kg
- 74 Thermometers can be used to know the of water.
 (a) shape (b) color (c) **temperature** (d) weight
- 75 All the following are measuring unit of volume except.....
 (a) liters (b) milliliters (c) cm³ (d) **kilogram**
- 76 is a property that shows if an object floats or sinks in another matter
 (a) Color (b) Odor (c) Shape (d) **Density**
- 77 Roofs are used to protect us from
 (a) dust and dirt (b) entering rain water (c) **a, b** (d) no correct answer
- 78 All the following from the physical properties of matter, except
 (a) Color (b) shape (c) **ability to burn** (d) temperature
- 79 We can differentiate between vinegar and perfume using
 (a) color (b) shape (c) texture (d) **odor**
- 80 A non-flammable gas that used to fill balloons is
 (a) hydrogen (b) **helium** (c) oxygen (d) water vapor
- 81 A book length or width can be measured using
 (a) **ruler** (b) thermometer (c) scale (d) measuring cup
- 82 is considered as a chemical change
 (a) **cutting vegetables** (b) boiling water (c) **Rusting iron** (d) melting of chocolate
- 83 All the following are chemical changes, except
 (a) digestion of food (b) burning (c) iron rust (d) **cutting Cloth**
- 84 On increasing the temperature of water (heating), it
 (a) freezes (b) melts (c) condenses (d) **evaporates**



- 85 is an example of the physical changes.
 (a) Iron rust (b) Rot of fruit (c) **condensation** (d) Making bread
- 86 When the water temperature decreases, water changes into
 (a) **ice** (b) water vapor (c) steam (d) a,b,c
- 87 Which of the following are examples of mixture?
 (a) sand and rock (b) ocean water (c) Atmosphere (d) **a,b,c**
- 88 When water evaporates, it changes fromstate to state.
 (a) solid to liquid (b) **liquid to gas** (c) a gas to liquid (d) liquid to solid
- 89 The change of matter from a gas state to a liquid state is called
 (a) evaporation (b) **condensation** (c) freezing (d) melting
- 90 The change of matter from a liquid state to a solid state is called
 (a) evaporation (b) condensation (c) **freezing** (d) melting

Question 02

PUT (√) OR (×)

- 1 The transport system of plant does the same function of circulatory system in human. ✓
- 2 Xylem vessels transport water and minerals in all directions. ✗
- 3 Light is important for plant growth. ✓
- 4 The plant absorbs carbon dioxide from the air to make its own food. ✓
- 5 Plant's stem has hairs that absorb oxygen gas from the air. ✗
- 6 Soil is among the basic needs of a plant. ✗
- 7 Seeds with good taste can be eaten and dispersed by animals. ✓
- 8 Sunlight is not important for the plant's growth. ✗
- 9 Plants and humans are similar in the way of getting food. ✗
- 10 Decomposers don't have a role in the ecosystem ✗
- 11 The first link in any food chain is a consumer ✗
- 12 The formation of water droplets on plant leaves due to the condensation process ✓
- 13 Hawks, crocodiles and sharks are predators. ✓
- 14 Human can eat plants and animals. ✓
- 15 Producers and consumers use carbon dioxide gas for making their food ✗



- 16 Habitat loss is one of the main causes of extinction ✓
- 17 Climate changes, pollution and human activities affect Ecosystem ✓
- 18 If coral reefs are destroyed, many marine food chains will be destroyed ✓
- 19 A desert food chain doesn't contain any type of fish. ✓
- 20 The death of microorganism affects the sea birds ✓
- 21 Milk is considered the solid state of matter ✗
- 22 Microplastic is a suitable food for many marine organisms ✗
- 23 The roof of desert home is similar to rainforest home ✗
- 24 The atmosphere is a mixture of many gases. ✓
- 25 Glass is a transparent material used in making eye glass ✓
- 26 Measuring cup is used to measure the length of the object ✗
- 27 Glass used to make tires because it is flexible. ✗
- 28 When a wooden cube is placed in a glass of water, it will float ✓
- 29 The length of a box can be measured in liters ✗
- 30 We can differentiate between iron and copper by taste. ✗
- 31 Copper can be stretched into a thin flexible wire. ✓
- 32 The matter changes from one state to other by increasing or decreasing of temperature ✓
- 33 When we burn a piece of paper, a new substance is formed ✓
- 34 Ocean water is a mixture because it consists of water, dissolved salts, and other materials. ✓
- 35 When we decrease the water temperature it evaporates ✗
- 36 Chemical change is reversible, because the substance doesn't change ✗
- 37 Freezing is the change of matter from a solid state to a liquid state ✗
- 38 The total number of particles in the matter doesn't change by changing the state of matter. ✓
- 39 The amount of matter doesn't change when it changes from one state to another ✓



Question 03

Complete the following sentences using words between brackets

- ① Plants are that get energy from the sunlight to make their own food. (Decomposers - **producers**)
- ② is a miniature plant waiting for the suitable conditions to grow (**Seed** – leaves)
- ③ consume the remains of dead animals and plants. (Consumers - **Decomposers**)
- ④ The captures sunlight to help the plant do photosynthesis. (**chlorophyll** - flower)
- ⑤ Any food chain begins with producers and ends with (producers - **decomposers**)
- ⑥ In longer food chains, are classified into primary, secondary and tertiary. (producers - **consumers**)
- ⑦ The amount of energy that transfers between living organisms in food web is.....(**10%** - 90%)
- ⑧ model used to study very large things (germs - **solar system**)
- ⑨ Coral bleaching occurs at..... (**High temperature** - low temperature)
- ⑩ Heavy rains may..... the desert ecosystem . (improve - **destroy**)
- ⑪ Rabbits die quickly when disappear from ecosystem . (Hawks - **Grasses**)
- ⑫ Plastic products are broken into smaller pieces because of rays. (water waves - **Ultra Violet**)
- ⑬ State of mater that has definite shape and volume is..... (**solid**-liquid)
- ⑭ The particles of gaseous state move.....(**freely** - slowly)
- ⑮ The movement of water particles are slower than that of (Wood- **oxygen**)
- ⑯ Which of the following matter has a no definite volume and shape? (Ice - **Air**)
- ⑰ Water takes theof its container (**shape** -volume)
- ⑱ is used to measure the mass of objects (measuring cup – **balance**)
- ⑲ Steel is used in making hammers, because it is.....(**hard** – soft)
- ⑳ liquids have shape. (definite - **no definite**)



- 21 When temperature of ice increase its particles (move slower - **move faster**)
- 22 process used to separate salt from salty water
(**Evaporation** - Filtration)
- 23process used to separate sand from water (**filtration** – evaporation)

Question 04

Complete The Following Sentences

- 1 **Xylem** are small vessels in the plant that transport water and nutrients to other parts of plant.
- 2 Burdock seeds can stick to animal fur because they have **spines**
- 3 Plants take **carbon dioxide** from air to make its food.
- 4 Plants make their own food during **photosynthesis** process
- 5 **Flower** produce seeds for the plant reproduction.
- 6 **Root** of plant absorbs water and nutrients from the soil.
- 7 Veins carry blood rich in **carbon dioxide** gas.
- 8 **Stomata** are narrow holes in plant's leaves.
- 9 Inside the green plant, sunlight allows carbon dioxide to combine with **water** that is absorbed from the soil by plant's root.
- 10 The food of plant is a type of **sugar** which is made in their leaves by photosynthesis process.
- 11 Different plants have three main common structures which are roots, **stem** and **leaves**.
- 12 Both humans and animals cannot produce their own **food**
- 13 Plants produce **oxygen gas** and **glucose** during photosynthesis process.
- 14 Decomposition process takes place on land as well as under **water**
- 15 Bread mold and mushroom are two types of **decomposers**
- 16 In a food chain, the energy flows from **primary** consumer to a secondary consumer
- 17 Sea birds feed on **small fish**
- 18 Frog eats an insect that feeds on plants, this means that frog is a **secondary** consumers.
- 19 Some marine animals can not differ between food and plastic as **sea turtle**
- 20 In a marine habitat micro plastic could be ingested by the **coral reefs** and this process harms it.



- 21 Secondary consumers feed on **primary consumers**
- 22 The human activity that decrease the marine population is **over fishing**
- 23 Plastic products get broken into small particles by the effect of **UV rays from sun**
- 24 A process of returning habitat to its natural state is called **habitat restoration**
- 25 Heavy rain causes **flooding** which destroys desert ecosystems.
- 26 Gaseous particles move **very freely**
- 27 **Matter** anything that has mass and take up space.
- 28 Water vapor is an example for **gas** state
- 29 Any matter is made up of millions of tiny **particles** that we can't see with our eyes
- 30 In the **solid** matter, the volume and shape don't change
- 31 The particles of **gas** matter have a lot of energy
- 32 You can use a ruler to measure the **length** of your book
- 33 Copper is used to make **electric wire** and **cooking pots**
- 34 1 kilogram = **1000** grams.
- 35 Gram is the measuring unit of **mass**
- 36 Volume is the amount of **space** that matter takes up
- 37 Thermometer is used to measure **temperature**
- 38 Matter has **mass** and **volume**.
- 39 Cutting a piece of paper is a **physical** change, while burn a piece of paper is a **chemical** change
- 40 When the temperature of water rises, water particles speed will **increase**
- 41 Melting is the change of a matter from a **solid** state to a **liquid** state by **heating**
- 42 Atmosphere is a mixture because it consists of different gases as **oxygen** , **nitrogen** , **water vapor**
- 43 iron rusting is considered as a **chemical** change.
- 44 The boiling of water to water vapor is considered **a physical** change



Question 05

Write the scientific term for each of the following

- ① The part of the plant that is responsible for making its food **green leaves**
- ② Parts of plant that fix the plant in the soil. **root**
- ③ It is found in plant's leaves gives them green color and absorbs energy from the sun **chlorophyll**
- ④ The transfer of seeds from one place to another. **seed dispersal**
- ⑤ It is a model that shows one linear set of feeding relationships and energy flow between living organisms **food chain**
- ⑥ Blood vessels carry oxygenated blood from heart to all body parts. **arteries**
- ⑦ The system that transports blood throughout the human body. **circulatory system**
- ⑧ The process by which plants make their own food by using the energy of sunlight. **photosynthesis process**
- ⑨ The gas that plant needs to make photosynthesis process **Carbon dioxide**
- ⑩ The primary source of energy for all organisms on earth **sun**
- ⑪ Tubes in the plant that transport food materials from the leaves to other parts of plant. **Phloem**
- ⑫ Vessels in plant through which water and nutrients move up from roots to leaves. **xylem**
- ⑬ Narrow holes spread on the plant's leaves that allow gases to come in and out the plant **stomata**
- ⑭ The plant part that supports it and holds the leaves **Stem**
- ⑮ Parts of the plant that are responsible for reproduction. **flowers**
- ⑯ A gas produced during photosynthesis and is needed for respiration of living organisms. **Oxygen gas**
- ⑰ It is the number of organisms of one type of species living in an area. **population**
- ⑱ It is a process through which decomposers can recycle elements back into the soil **Decomposition process**
- ⑲ A group of interconnected food chains **food web**
- ⑳ The animal that is eaten by another animal **prey**





- 21 An area (community) that contain living organisms and non-living things **ecosystem**
- 22 They are organisms that break down the bodies of dead animals into small pieces. **scavengers**
- 23 It is a process through which humans can make new products from waste materials **recycling process**
- 24 They are animals that eat plants **Primary consumer**
- 25 A group of living organisms that can produce their own food. **Producers**
- 26 The consumer that hunts and eats another animal. **Predator**
- 27 It is a copy that is similar to the real thing **Model**
- 28 They are consumers that exist at the top of food chains. **Top predator**
- 29 It is an area in the sea where scientists take care of small pieces of coral until they grow up **nursery**
- 30 A model of the whole world that is made in the shape of a large ball. **Globe**
- 31 Flying living organisms that build their nests on the top of mountain cliffs and feed on small fish **Sea birds**
- 32 The corals turn completely into white **Coral bleaching**
- 33 A human activity that affects marine food webs and cause decreasing the number of fish **Over fishing**
- 34 Small pieces of plastics in size of rice grains and they cause harms to marine organisms **Microplastics**
- 35 The process of returning a habitat back to its natural state. **Habitat restoration**
- 36 It is a temperature at which matter changes from liquid to solid **freezing point**
- 37 The state of water after its freezing. **Solid state**
- 38 Anything has mass and volume **matter**
- 39 The state of matter that has fixed shape and volume. **Solid state**
- 40 A tool is used to measure the length of wall or room **Tap measure**
- 41 The building unit of matter. **particles**





- 42 It is a measure of the amount of matter. **Mass**
- 43 A tool (device) used to see tiny particle such as a germs **Electron microscope**
- 44 The state of water when its temperature between 0°C to 100°C **liquid state**
- 45 The formation of a flaky reddish layer of iron oxide occurs when iron reacts with oxygen **iron rust**
- 46 It is a type of energy we get from the sun used in warming house and cooking food **Thermal energy**
- 47 It is a change in matter with a change in its structure producing a new substance **chemical change**
- 48 The state of water after heating for high temperature. **Gas state**
- 49 The state of matter that keep its shape and its particles packed tightly **Solid state**
- 50 The ability of materials to transfer heat and conduct electricity **Conduction**
- 51 A device that is used to measure the volume of liquids **measuring cup**
- 52 Is everything around us that has a mass and takes a space. **matter**
- 53 They are the properties that can be observed or measured without any change in the matter **physical properties**
- 54 It is a process by which a matter is changed from solid to liquid state. **Melting process**
- 55 They are changes in matter which are usually reversible and don't affect its structure. **Physical change**
- 56 It is the process by which matter changes from liquid state to gas state. **Evaporation process**
- 57 It is the process by which matter changes from gas state to liquid state **Condensation process**

Question 06**Give reason for each of the following**

- 1 Green plants can make their own food. (Plants are producers)
Because plant make photosynthesis process
- 2 There are stomata in the plant leaves.
To allow gases to move into and out of the pant



- 3 Burdock seeds can stick to animal fur.
Because burdock seeds have spines
- 4 Human needs to eat some animals and plants.
To get energy
- 5 Seeds of maple or dandelion plants can disperse through wind easily.
Because they are light seeds
- 6 Roots are important to plants.
Roots absorb water and minerals from soil to the rest of plant
- 7 There are tubes called phloem inside the plant.
To transport the food materials downward from leaves to all plant parts
- 8 Chlorophyll in plant's leaves has an important role in photosynthesis process.
Because chlorophyll absorbs sun light to make photosynthesis process
- Plants are very important for other living organisms.
- 9 Because plant take carbon dioxide gas from air and produce oxygen gas that is living organisms used to breath
- Sun light is important for all living organisms
- 10 Because plant absorb sun light during photosynthesis process to make its food
- Importance of healthy habitat for all living organisms
- 11 Because it provides organisms with food, water and shelter
- Gentle rains cause a healthy ecosystem.
- 12 Because gentle rain benefit producers (let grass grow)
- Air is matter - Book is matter – salt is matter
- 13 Because it has a mass and volume (take a space)
- Wood is solid matter
- 14 Because wood has definite shape, definite volume
- Brick differs from feather. (According to their hardness).
- 15 Brick is hard – feather is soft
- When you blow the air inside a balloon, the air takes the shape of it.
- 16 Because air is gas has no definite shape or volume
- Desert ecosystem contains few members of primary consumers
- 17 Because primary consumers feed on producers and desert doesn't have many plants



- 18 It is safe to use helium gas
because helium is not flammable and not poisonous
- 19 Helium gas used to fill balloons and blimps
because helium is lighter than air (density of helium less then density of air)
- 20 Copper is used to make cooking pots
Because copper is good conductor of heat.
- 21 Melting and freezing are considered as a physical changes.
because the structure of matter doesn't change
- 22 Ice change into water when it left out of refrigerator
Ice melts ,when temperature increase particles move faster and change from solid state into liquid state
- 23 Ice melt when the temperature increases
particles gain energy and move faster and ice change from solid state to liquid state (water)
- 24 Burning of wood is considered a chemical change.
Because when wood burn it form new substance with new properties (ash)

Question 07

What happens if ?

- 1 A plant is placed in a dark place (isn't exposed to sunlight for a few days.)
It cannot make photosynthesis process and it will die
- 2 We put a seed of bean in a soil.
It will germinate and begins to grow
- 3 Plants have no stems.
Water and nutrients cannot transport to leaves
- 4 Plant's leaves don't contain chlorophyll.
Plant cannot absorb energy of sun and cannot make photosynthesis
- 5 There is no decomposition process done on the Earth.
Dead bodies will not be decomposed - nutrients will not return back to the soil
- 6 Coral reefs when water temperatures rise.
Coral gets rid of algae, coral color turn to white
- 7 When temperature of water contain microorganisms increases
microorganisms and fish that feed on it will move away to a cooler water
- 8 The number of one species increases a lot. (Concerning food resources).
Food resources will disappear they will not find enough food to eat so they will die



- 9 When small lakes exposed to extreme hot climate
The water in lake will evaporate and the lake may completely disappear
- 10 The number of secondary consumer decrease in an ecosystem
Number of primary consumer increase and amount of producers (plants) decrease and it disturb the ecosystem
- 11 Bleaching of coral reefs.
coral color turn to white and it will die
- 12 Leave a piece of iron exposed to wet air.
it will rust because iron react with oxygen in air and form layer of iron oxide
- 13 Ultraviolet rays fall on the plastic that present in sea
microplastic will be formed
- 14 Heavy rains fall on the desert
lead to floods
- 15 Melting of ice. (Related to the change in its state)
Solid state (ice) will change into liquid state (water)
- 16 When ice cubes exposed to heat (concerning the state and the speed of particles)
It will melt ,speed of particles will increase and change from solid state to liquid state
- 17 We add yeast to doughs (pastry)
Chemical change happened and new substance will form (gas bubbles)
- 18 We leave ice out of freezer.
Ice will melt change from solid state (ice) into liquid state (water)

Question 08

cross the odd word

- | | | |
|---|--|------------------|
| 1 | Carbon dioxide gas - Water - Oxygen gas - Sunlight | <u>oxygen</u> |
| 2 | Roots -Stems - Leaves - Sunlight | <u>sun light</u> |
| 3 | green plant – shelter – water – sun light | <u>shelter</u> |
| 4 | Arteries - blood - veins - stomata | <u>stomata</u> |
| 5 | Foxes -lions- tiger - rabbits | <u>rabbits</u> |
| 6 | Eagle - Hawk - Rabbit - Crocodile | <u>rabbit</u> |
| 7 | Bacteria - Rabbit - mouse - bird | <u>Bacteria</u> |
| 8 | Fox - Eagle - Clam – Rabbit | <u>clam</u> |
| 9 | Lion - deer - Moon – Grass | <u>moon</u> |



- 10 Fungi-Bacteria- Plants-Earthworm
- 11 water - oil - light – alcohol
- 12 plastic - iron - aluminium – vinegar
- 13 water-milk-sand
- 14 sound – light – ice

plants
light
vinegar
sand
Ice

Question 09

Complete the following using words between brackets

1

(coconut - primary - producer - carbon dioxide)

- 1 living organisms including producer consumer and decomposer.
- 2 In photosynthesis process, green plants gets carbon dioxide gas from air to make its food.
- 3 In food chain energy flow forms primary consumer to secondary consumer.
- 4 The seed that can be transported by float on water as coconut

2

(roots - xylem - leaves - phloem)

- 1 Water and nutrients move up in plants through xylem
- 2 Stomata are tiny pores on the surface of plan leaves that allow gases to move into and out of plant.
- 3 The roots of plant absorb water from the soil.
- 4 Phloem is a tubes carry sugars from the leaves to all plant parts.

3

(Fungi – stomata – roots – stem - spines)

- 1 The roots of plant absorb water and nutrients from the soil.
- 2 Gases enter the plant through stomata.
- 3 Burdock seeds have spines to stick to animal fur.
- 4 Fungi is an example of decomposers.

4

(sunlight - lion - rabbit - circulatory system)

- 1 lion is a predator animal.
- 2 In Photosynthesis process plant use sunlight to make food.
- 3 circulatory system is the system that transports blood throughout the human body.
- 4 rabbit is a primary consumer.



5

(energy -pollution – sea birds – coral bleaching)

- ① When water temperatures rise **coral bleaching** happens
- ② Throwing plastic wastes into a river causes water **pollution**
- ③ When predator feed on prey, predator get **energy** from prey
- ④ **Sea birds** dive deep down into the sea to feed on small fish

6

(Phloem – bacteria and fungi – measuring tape – melts – balance – evaporates)

- ① One example of decomposers is **bacteria and fungi**
- ② **Phloem** transports the glucose from the leaves to other parts of plants.
- ③ When ice **melts**, it will change from solid state to liquid one.
- ④ We can measure the length of classroom by using **measuring tape**

7

(Model – physical – chemical – imbalance – producers – decomposers)

- ① When a drought occurs in a lake, it causes **imbalance**.in ecosystem.
- ② The **producers** get the energy from sunlight.
- ③ Iron rust and burning reactions are from **chemical** change.
- ④ **model** is a copy that is similar to real thing to show what it looks like or work like.

Question 10

Answer the following questions

- ① What are the main parts of plant?
Root – stem – leaves
- ② Mention two methods of seed dispersal
A - floating on water example coconut seed
b- by wind example maple – dandelion seeds
- ③ Explain (The plants are the first link in any food chain)
plant can make its own food through photosynthesis process
- ④ What is the reason for coral bleaching?
Increase the temperature of water



- 5 What are the reasons of losing habitat?
**pollution – over fishing – building up more buildings and roads
 throwing wastes in water**
- 6 Mention one of the human activities that affect the marine environment
Over fishing – water pollution
- 7 Use the following words to form a food chain:
 a- bird -insect- grass -snake
Grass → insect → bird → snake
 b- Hawk - Grasses - Rat - Snake
Grass → rat → snake → hawk
 c- Shark- Algae - sea star- Clam
Algae → clam → sea star → shark
 d- small fish - seabirds -bacteria - micro-organisms floating on the surface of the sea
Microorganisms floating on the surface of the sea → small fish → seabirds → bacteria
- 8 Study the following food chain then complete the sentences below:-
 Plant → Rabbit → Hawk → Bacteria.
 a- The **plant** is a producer.
 b- The **hawk** is a secondary consumer.
 c. The **rabbit** is a first consumer in this food chain
 d. bacteria is a **decomposer**.

تم بحمد الله ،

بسم الله الرحمن الرحيم " إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ إِنَّا لَا نُضِيعُ أَجْرَ مَنْ أَحْسَنَ عَمَلًا " صدق الله العظيم





Final Revision

*(1) Choose the right answer:

Mr. Ahmed Elbasha

1. Decomposers can get their energy from

- a. living things b. soil and water c. dead organisms d. the sun

2. In this food chain (Grass → rabbit → hawk), if the rabbits disappear, will increase.

- a. Grass b. hawks c. a and b d. no correct answer

3. In this food chain (Acacia tree → giraffe → Lion).

The symbol (→) represents the flow of

- a. pollution b. force c. energy d. motion

4. Healthy desert ecosystems always require from time to time.

- a. strong winds b. heavy rain c. gentle rain d. floods

5. Heavy rain may the desert ecosystem.

- a. improve b. benefit c. harm d. restore

6. If the grass is removed from an ecosystem, will die first.

- a. primary producers b. primary consumers
c. secondary consumers d. decomposers

7. When the number of predators increases, the number of decreases.

- a. producers b. other predators c. decomposers d. prey

8. All the following examples represent bad human activities, except

- a. Overfishing b. air pollution c. floods d. plastic pollution

9. Nutrients are recycled back into the ecosystem by the

- a. predators. b. prey c. consumers d. decomposers

10. If the number of primary consumers increases so much, will disappear.

- a. Producers b. Decomposers c. secondary consumers d. tertiary consumers

11. If the climate change was suitable, the living organisms will

- a. die b. migrate c. survive d. extinct

12..... live on the tops of mountain cliffs and depend on fish as their main source of food.

- a. Eagles b. Hawks c. owls d. seabirds

13.The migration of microorganisms to a new habitat is due to the increase of

- a. the air temperature b. The water temperature
c. the number of seabirds d. the number of fish

14.Increasing water temperature may cause all the following, except

- a. increasing microorganisms b. coral bleaching
c. migration of fish d. death of some seabirds

15.If the turtle sees a plastic piece, the turtle will

- a. avoid it b. escape quickly
c. begin to eat it d. digest it

16..... is one of the best ways to protect the marine ecosystem.

- a. Throwing sewages in seas b. Using plastics for single use
c. Breaking plastics d. Recycling plastics

17.Micro-plastics are formed by the effect of the

- a. air b. sun c. water d. soil

18..... is an area in the ocean where the small pieces of corals are nurtured.

- a. Coral reefs b. The nursery c. Protectorate d. Garden

19..... is one of the ways done by coastal communities to reduce plastic pollution.

- a. Replacing wooden forks with plastic ones b. Using grocery plastic bags
c. Using single-used plastics d. Using cloth bags

20.If the number of, the grass will increase in the ecosystem.

- a. Decomposers decreases b. producers increases
c. Primary consumers increases d. primary consumers decreases

21..... are the top predators in their food chain.

- a. Frogs b. Birds c. Alligators d. Butterflies

22.All the following organisms depend on another organism to get their energy, except

- a. predators b. prey c. green plants d. b and c

23. A population change refers to the increase or decrease in

- a. water and food resources
- b. the weather temperature
- c. number of living organisms
- d. the water temperature

24. Which matter has a definite shape?

- a. Water
- b. ice
- c. oil
- d. air

25. Anything that has mass and occupies space is called

- a. energy
- b. force
- c. matter
- d. weight

26. Any matter exists in state(s).

- a. One
- b. two
- c. three
- d. four

27. All matter around us consist of

- a. Cells
- b. particles
- c. nutrients
- d. proteins

28. Matter can be described by

- a. Hardness
- b. color
- c. shape
- d. all the previous

29. Which of the following examples isn't a matter?

- a. Bird's feathers
- b. Cup of water
- c. Empty cup
- d. Bird sound

30. are same matters, but they exist in the different states.

- a. Wood and brick
- b. Oxygen and water
- c. Oil and tea
- d. Ice and water vapor

31. Tiny particles inside move very freely.

- a. Water
- b. air
- c. wood
- d. ice

32. Thermometer can be used to know the of water.

- a. Shape
- b. color
- c. temperature
- d. weight

33. Water is described by all of these properties, except

- a. We can pour it
- b. it occupies space
- c. It has a definite shape
- d. It takes the shape of the container

34. Plants take from the air to make its own food.

- a. water
- b. oxygen gas
- c. carbon dioxide gas
- d. sugar

35. A community that includes living organisms and non-living things is known as

- a. digestive system.
- b. respiratory system.
- c. ecosystem.
- d. vascular system.

36. When the marine habitats are destroyed, the number of living organisms in their food webs is

- a. increased. b. decreased. c. not changed. d. doubled.

37. The primary source of energy for all living organisms on the Earth, is

- a. the Sun. b. green plants. c. glucose sugar. d. photosynthesis process.

38. Steel is used in making hammers, because it is

- a. flexible. b. smooth. c. hard. d. transparent.

39. The volume of one liter of water has a mass of

- a. one gram. b. one kilogram. c. one milliliter. d. one cubic centimeter.

40. When the water is heated, its particles

- a. move slower. c. move with the same speed.
b. move faster. d. do not move.

41. Salt can be separated by of salty water.

- a. melting b. evaporation c. freezing d. condensation

42. In plant's leaves, light energy is converted into energy during photosynthesis.

- a. sound b. electric c. chemical d. kinetic

43. Which of the following matter has a definite volume and shape ?

- a. Water. b. Milk. c. Ice. d. Air.

44. Which of the following living organisms can make their own food?

- a. Hawks. b. Mice. c. Pine trees. d. Caracals.

45. A snake is a predator for mice, while snake is considered as a prey for

- a. rabbit. b. frog. c. eagle. d. deer.

46. Oil takes the of its container.

- a. volume b. shape c. color d. mass

47. Condensation changes the matter from state to state.

- a. . solid - liquid b. liquid - gas c. gas - liquid d. liquid - solid

48. We can measure the volume of a liquid by all the following units except

- a. kilogram. b. milliliters. c. cubic centimeters . d. liters.

49. Among chemical changes which is occurred in cooking is

- a. cutting vegetables.
- b. boiling of water.
- c. melting of chocolate.
- d. baking a cake.

50. Many insects are considered as

- a. producers.
- b. decomposers.
- c. primary consumers.
- d. secondary consumers.

51. To separate sand from water, we can use process.

- a. filtration
- b. evaporation
- c. melting
- d. freezing

52. The of plant get water and nutrients from the soil.

- a. roots
- b. stems
- c. leaves
- d. flowers

53. All of the following are from the physical properties of matter except

- a. texture
- b. temperature
- c. density
- d. rusting

54. The parts of the plant that absorb sunlight to complete the process of photosynthesis are

- a. stems
- b. leaves
- c. root hairs
- d. flowers

55. Which of these options could be the correct order of a food chain?

- a. Mouse → Hawk → Snake → Grass
- b. Grass → Rat → Hawk → Snake
- c. Grass → Locust → Frog → Snake
- d. Locust → Mouse → Snake → Nest

56. are organisms responsible for returning nutrients into the soil.

- a. Producers
- b. Consumers
- c. Decomposers
- d. Autotrophs

57. Which of the following is not a physical change of matter?

- a. Cutting paper
- b. Dissolving sugar in water
- c. Producing yogurt from milk
- d. Recycling paper

58. Matter that does not have a fixed volume and does not have a fixed shape is a

- a. solid
- b. liquid
- c. gas
- d. wood

59. The ecosystem consists of

- a. living organisms only
- b. non-living things only
- c. living organisms and non-living things
- d. No correct answer.

60.Plants use energy from to make their own food.

- a. batteries b. fire c. sunlight d. wind

61.Matter is

- a. only liquids b. anything that has mass and takes up space
c. only water in different states d. only solids

62.Which of the following materials has a fixed shape and a fixed volume?

- a. Solid b. Liquid c. Gas d. All the previous answers

63.Electric wire is usually made up of copper,

- a . because copper is a bad conductor of heat
b. because copper is a good conductor of heat
c. because copper is a bad conductor of electricity
d. because copper is a good conductor of electricity

64..... is the gaseous state of water .

- a. Ice b. Vapor c. Water d. Wax

65.The stomata exist on in the plant

- a. stems b. leaves c. root hairs d. stems and . leaves

66.Plants make their own food through a process

- a. reproduction b. photosynthesis c. germination d. respiration

67.The particles of matter are very close to each other in the state .

- a. solid b. liquid c. gaseous d. All the previous answers

68..... is a community of living organisms, non-living things, and the environment.

- a. Habitat b. Ecosystem c. Food web d. Food chain

69.Plants are that get energy from the sun to make their own food .

- a. decomposers b. consumers c. producers d. non-living

*** مواعيد البث المباشر علي يوتيوب ص 25**

***(2) Complete the following using the words between the brackets:**

1. Rabbits die quickly when disappear from the ecosystem.
(hawks – grasses)
2. water is suitable for microorganisms.
(Cold – Warm)
3. Corals the seawater to get their food.
(absorb – filter)
4. Gentle rain may the desert ecosystems.
(benefit – harm)
5. Habitat loss may the ecosystems.
(benefit – harm)
6. Heavy rain may the desert ecosystems.
(improve – destroy)
7. Habitat restoration may the ecosystems.
(benefit – harm)
8. Habitat loss for any living organism make them
(go extinct – survive)
9. Decomposers recycle nutrients to
(soil – air)
10. Coral bleaching means the coral color turns to
(red - white)
11. Algae in the marine food web are considered as
(consumers – producers)
12. The amount of rainfall has a strong effect on the ecosystem.
(marine – desert)
13. Examples of the decomposing organisms are
(plants and algae - fungi and bacteria)
14. Melting a piece of wax is a change.
(Physical - chemical)
15. A is used to measure the dimensions of your class.
(measuring tape - measuring cup)

16. The states of matter depend on the arrangement of in a substance.
(proteins - particles)
17. The consumer eaten by another animal is called a
(predator - prey)
18. We can separate the mixture of by filtering .
(water and salt - sand and water)
19. From the units used to measure mass is
(kilogram - liter)
20. The feeds on the remains of dead organisms.
(producer - decomposer)
21. The gas which is produced from the photosynthesis process is
(oxygen - carbon dioxide)
22. The temperature of boiling water is measured by a
(scale - thermometer)
23. When liquid water is placed in the refrigerator, the movement of particles becomes
(slower - faster)
24. Stomata allow air rich in to be released from the leaves.
(oxygen - carbon dioxide)
25. Any food chain begins with producers and ends with
(producers - decomposers)
26. Scientists use to study phenomena that might be difficult to observe directly.
(models - reports)
27. Any food chain begins with a
(producer - decomposer)
28. has a bad effect on ecosystem.
(Drought - Recycling)
29. The boiling point of water is
(0°C - 100°C)
30. Particles of a matter are in a state.
(motion - static)

31. Heavy rains the desert habitat.

(develop - destroy)

32. The particles of vibrate only and do not move from their places.

(solids - gases)

33. Throwing plastic in water is one of the impacts of human activities.

(positive - negative)

34. We can reduce the amount of plastic in aquatic ecosystems by

(increasing use - recycling)

35. is the measure of how fast the particles move in a substance .

(Mass - Temperature)

36. In celebration , balloons are filled with helium gas because it has than the air

(less density - more density)

37. In many food chains, the rabbit is an example of

(first consumers - third consumers)

38. Snow differs from water in

(Composition - physical state)

39. The mixture of sand and water can be separated by

(Filtration - magnet)

40. Green plants can be classified as

(Producers - decomposers)

41. Water vapor is an example of a substance in the state.

(Liquid - gaseous)

احرص علي حضور البث المباشر والاشتراك في القناة

✱ (3) Write the scientific term :

- 1) Organisms that return the energy back to the ecosystem (.....)
- 2) A bird that builds its nest on the top cliff and depends on fish to get its energy (.....)
- 3) A process in which humans can make new products from waste materials (.....)
- 4) A phenomenon that causes the coral to turn completely white (.....)
- 5) Rays coming from the sun that cause the formation of microplastics (.....)
- 6) The number of living organisms of one species (.....)
- 7) Small pieces of plastic that formed due to the UV of the sun falling on it. (.....)
- 8) The increase or decrease in the number of living organisms (.....)
- 9) The harm that affects air, water, or soil due to human activities (.....)
- 10) It is the returning of land and water back to how they were before harm was done (.....)
- 11) It is an area in the ocean where the small pieces of corals are nurtured (.....)
- 12) Anything around us that has mass and occupies space (.....)
- 13) A state of matter in which matter has a definite shape (.....)
- 14) A state of matter that can be poured in a container (.....)
- 15) A device that is used to measure the temperature of milk (.....)
- 16) A process in which ice changes into water (.....)

- 17) A process in which water changes into ice (.....)
-
- 18) The animal that is eaten by another animal. (.....)
-
- 19) The liquid substance that plants, animals and human need to survive. (.....)
-
- 20) A part of the plant that fix it in the soil. (.....)
-
- 21) It is a process by which a matter is changed from solid to liquid state. (.....)
-
- 22) The property of matter which is measured by the measuring cup. (.....)
-
- 23) A model of the whole world that is made in the shape of a large ball. (.....)
-
- 24) They are consumers which feed on secondary consumers. (.....)
-
- 25) They are changes in matter which are usually reversible and don't affect its structure. (.....)
-
- 26) It is the process by which matter changes from liquid state to gas state. (.....)
-
- 27) A tool is used to measure the length of wall. (.....)
-
- 28) They are consumers that exist at the top of food chains (.....)
-
- 29) It is a measure of the amount of matter. (.....)
-
- 30) It is the process by which matter changes from gas state to liquid state. (.....)
-
- 31) Parts of the plant where sunlight allows carbon dioxide to combine with water during photosynthesis process. (.....)
-
- 32) A matter that is formed when two or more materials combine chemically. (.....)

- 33) Narrow holes spread on the surface of plant's leaves that allow gases to come in and out the plant. (.....)
-
- 34) The property of matter which is measured by the balance. (.....)
-
- 35) The process by which plant can make its own food. (.....)
-
- 36) It is a model that shows a linear set of feeding relationships and energy movement among living things within specific species. (.....)
-
- 37) The substance that gives plants their green color and absorbs sunlight to complete the process of photosynthesis . (.....)
-
- 38) The process of converting a substance from a liquid state to a solid state by cooling. (.....)
-
- 39) It is a form of matter made of two or more different compounds mixed together physically. (.....)
-
- 40) A material that allows heat to pass easily through. (.....)
-
- 41) Plant structures that anchor the plant in the soil. (.....)
-
- 42) Materials that have fixed shapes and take up space . (.....)
-
- 43) It is a change in the shape and the size of the matter only without forming new substance. (.....)

***(4) Complete the following :**

1. Matter is anything that has and occupies space.
2. Matter can exist in three states that are , and
3. The particles inside state move very freely.
4. Light and sound are not , but they are considered forms of
5. Water has shape and size.
6. Throwing plastic garbage and waste materials into a river causes water
7. Without in the leaves of plants, gases can't move in or out of the plant.
8. Melting of wax is a change, while burning of wood is a change.
9. When we heat an ice cream, it and becomes liquid.
10. We can use in making hammers because it is and strong.
11. You can use a to measure the mass of matter, while you can use a to measure its temperature.
12. An area that provides food, water and shelter to all living organisms which live in it, is known as
13. In a food chain, the energy flows from consumer to a secondary consumer.
14. Particles of liquid matter can move more faster than matter and move slower than matter.
15. In the matter, the volume and shape don't change.
16. Water evaporates when it is exposed to a temperature.

*** (5) Put (√) or (X) :**

1. Heavy rain improves the desert ecosystem more than gentle rain. ()
2. Energy remains in an ecosystem and it's transferred between its components. ()
3. Overfishing is one of the most natural events that impact the marine ecosystem. ()
4. Heavy rain in the desert causes the growth of more producers. ()
5. The number of prey increases when the number of predators decreases. ()
6. Increasing the number of primary consumers may make producers disappear. ()
7. Habitat loss may cause extinction for any species of living organisms. ()
8. Using plastic grocery bags is better than using cloth bags. ()
9. Sea turtles and corals are always in danger due to plastic pollution. ()
10. The state of matter can't be changed from one form to another. ()
11. Matter exists everywhere around us in nature. ()
12. The particles in ice move more freely than in water. ()
13. Water always takes the shape of the container that it is poured in. ()
14. Matter consists of tiny moving particles. ()
15. Gases completely fill a closed container, such as when you blow a balloon. ()
16. Ice melts into water by cooling it. ()
17. Water has indefinite shape and size. ()
18. Air enters plants through roots. ()
19. If coral reefs are destroyed, many marine food chains will be destroyed. ()
20. When particles of a matter absorb thermal energy, they move slower. ()
21. Ecosystem can be affected by climate changes, pollution and human activities. ()
22. Iron spoon is attracted to the magnet. ()
23. When a solid matter gains thermal energy, it will change into liquid state. ()
24. We can use thermometer to measure the temperature of a hot cup of tea. ()
25. If we increase the temperature of some pieces of ice, they will melt. ()
26. Photosynthesis process takes place in the plant roots. ()
27. The first link in any food chain is a consumer. ()

Science	First Term 2022/2023	Grade 5
28.The speed of water vapor particles is greater than that of water particles.	()	
29.Light and sound are forms of matter.	()	
30.Liquids don't take the shape of the container that they are placed in.	()	
31.Metal rusts due to chemical changes that occur to the material.	()	
32.Temperature affects the mass of a substance.	()	
33.The measuring tape is used to measure dimensions of the school class.	()	
34.Any substance consists of particles in a state of continuous motion.	()	
35.Air consists of gaseous mixtures.	()	
36.Liquids can be poured, while solids can't.	()	
37.The burning wood can return to its original shape.	()	
38.Both plants and humans need gases to survive.	()	
39.All kinds of matter have the same chemical and physical properties.	()	
40.Veins carry blood rich in carbon dioxide and low in oxygen to the heart.	()	
41.Wood is used in handles of cooking pans, as it is a good conductor of heat.	()	
42.Rusted iron and burning wood are examples of chemical changes .	()	
43.Solids and liquids both have definite shapes.	()	
44.Matter can change from one state to another.	()	
45.In food web, the energy transfers from a primary consumer to a producer.	()	

✱(6) Cross out the odd word:

1. Oil – Milk – Feather – Juice.
2. Wood – Ice – Oxygen – Iron
3. Air – Water vapor – Ice – Carbon dioxide.
4. Water – Air – Light – Wood.
5. Oil - Milk - Water - Wood.
6. Roots - Stems - Leaves - Sunlight.
7. Water - Gasoline - Gold - Milk.

✱ (7) Correct the underlined words :

1. Chlorophyll in plant's roots absorbs energy from the sunlight. (.....)
2. Coconut seeds disperse by wind. (.....)
3. Respiration process helps the plant to make its own food. (.....)
4. Due to rising of water temperature, coral reefs turn completely into green. (.....)
5. Tree trunks are climb stems. (.....)
6. There are tiny holes on the stem to allow gases passes into the plant (.....)
7. Plant's leaves help it to be fixed in the soil. (.....)
8. Humans can get their food from air and animals. (.....)
9. Oxygen gas is absorbed by plant's leaves to make photosynthesis process. (.....)

***(8) Give reasons for:**

1. Decomposition process is a nature's recycling factory.

.....

2. Increasing the number of one species of living organisms causes its death.

.....

3. Gentle rain benefits the desert ecosystem.

.....

4. Falling of heavy rain harms the desert ecosystem.

.....

5. Microorganisms in water make the same role of grass in the desert.

.....

6. Sometimes sea turtles feed on plastic pieces.

.....

7. Plastics are so harmful for the marine ecosystem.

.....

8. Restoration process helps to recover ecosystems.

.....

9. Air is a matter.

.....

10. The roof of desert home is made of strong stones.

.....

11. Human needs to eat some animals and plants.

.....

12. Ice is turned into water when it is placed in a warm room.

.....

13. Balloons and blimps filled with helium always rise up in the air.

.....

14. The roof of tropical rainforest home is made of leaves and sticks.

.....

15. Chlorophyll in plant's leaves has an important role in photosynthesis process.

.....

★(9) What happens if:

1. Decomposers disappear in an ecosystem.

.....

2. Increasing the number of secondary consumers.

.....

3. Grass disappears from an ecosystem.

.....

4. The number of one species increases so much. (Concerning food resources)

.....

5. The number of predators increases so much. (Concerning number of prey)

.....

6. Gentle rain falls in the desert.

.....

7. Heavy rain falls in the desert.

.....

8. Water is poured into a cup of water.

.....

9. Ice cubes are exposed to heat.

.....

10. Liquid changes into gas (Concerning the speed of particles).

.....

11. A magnet is put close to an iron nail and a plastic spoon.

.....

12. The speed of particles of an ice cube when it is exposed to the Sun.

.....

13. The temperature of a matter if the speed of its particles decreases.

.....

*(10) Matching:

1

Column (A)	Column (B)
1. Gentle rains	a. Harm the desert ecosystem.
2. Heavy rains	b. Reduces Ocean pollution.
3. Overfishing	c. Improve the desert ecosystem.
4. Recycling plastics	d. Destroys the marine ecosystem.

1-

2-

3-

4-

2

Column (A)	Column (B)
1. Photosynthesis	a. Causes death or extinction of living organisms
2. Decomposition	b. Is a way that is used to reduce plastic pollution
3. Zero plastics	c. Means that the coral color turns to white.
4. Habitat loss	d. Releases oxygen in the air.
5. Coral bleaching	e. Recycles nutrients to the soil.

1-

2-

3-

4-

5-

3

Column (A)	Column (B)
1. Matter	a. Is not a matter.
2. Particles	b. Is an invisible form of matter.
3. Sound	c. Exist inside the matter in a continuous motion.
4. Oxygen	d. Exists in three states.

1-

2-

3-

4-

4

Column (A)	Column (B)
1. solid state	a. Has indefinite shape and definite size.
2. liquid state	b. Has definite shape and size.
3. gaseous state	c. Has indefinite shape and size.

1-

2-

3-

5

Column (A)	Column (B)
1. thermometer	a. Is used to measure the height of a boy.
2. balance	b. Is used to measure the temperature of hot tea.
3. measuring tape	c. Is used to measure the mass of fruits.

1-

2-

3-

6

Column (A)	Column (B)
1. Carbon dioxide	a. is a liquid matter.
2. Ice	b. is a gas matter.
3. Gasoline	c. is a solid matter.

1-

2-

3-

7

Column (A)	Column (B)
1. Condensation	a. is the change of water from solid state to liquid state.
2. Melting	b. is the change of water from gas state to liquid state.
3. Freezing	c. is the change of water from liquid state to gas state.
4. Evaporation	d. is the change of water from liquid state to solid state.

1-

2-

3-

4-

8

Column (A)	Column (B)
1. Photosynthesis process	a. it is a process in which the blood carry oxygen to all body parts.
2. Decomposition process	b. it is a process in which the nutrients are returned to the ecosystem.
	c. it is a process through which producers make their own food.

1-

2-

9

Column (A)	Column (B)
1. Photosynthesis process	a. It produces nutrients, which is important for soil fertility.
2. Respiration process	b. It produces light, which is important for plants.
3. Decomposition process	c. It produces oxygen gas, which is important for breathing.
	d. It produces carbon dioxide gas, which is important for plants.

1-

2-

3-

*(11) Try to answer

1

Study the following food web, then complete the sentences using the words between the brackets:

a. If the population of rabbits increases, May disappear.



(foxes – grass)

b. The snake is considered a consumer.

(primary – secondary)

c. The rabbit provides energy to the

(eagle – grass)

d. If the grass is removed, the mouse and rabbit will

(migrate – die)

2

Study the following food web, then complete the sentences using the words between the brackets:

a. Letter (.....) represents the producer.

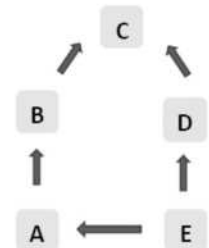
(A – E)

b. Letter (B) represents the consumer.

(primary – secondary)

c. Letter (C) is the tertiary consumer when it feeds on letter (.....)

(B – A)



3

Study the following figure, then answer the questions:

a. What is the name of this phenomenon?

.....

b. Is this a healthy ecosystem? (Yes/No)

c. What is the reason of this phenomenon?

.....



4

Complete the following sentences using the words below :

(extinction - overfishing - shelter- toxic -predator)

1. Healthy natural resources include clean air, healthy food, water and suitable
2. The human activity that directly decreases the marine population is known as
3. Habitat loss does not only cause a decrease in the marine population but also it is one of the main reasons for
4. When a sea turtle eats a jellyfish, this means that the sea turtle is a living organism.
5. Plastic waste materials are very harmful to marine organisms, because they are and sharp.

5

Complete the following sentences using the words below :

(solid - liquid - gas - space - particles)

1. State of matter that has a definite volume, but it doesn't have a definite shape is
2. Volume is the amount of that matter takes up.
3. We can classify the states of matter into liquid, and
4. Matter is made up of tiny

6

Complete the following sentences by using the words below :

(chemical - physical - rough - odor)

1. Both of odor and texture of matter are considered from the properties of matter.
2. You can identify the of a juice by using the sense of smell.
3. We can describe the texture of sugar crystals by saying it has crystal texture.
4. The ability of a piece of iron to rust is from the properties of matter.

7

Look at the opposite figure, then put (√) or (X) :

1. Label ❶ refers to a matter in liquid state.
2. Label ❷ refers to a matter in solid state.
3. Label ❸ refers to a matter that its shape and volume don't change.
4. Particles of matter ❶ move slower than particles of matter ❸



8

Complete the following sentences, using the given words:

(xylem - physical - chemical - gaseous - Liquid - food web - energy)

1. The vessels transport water and nutrients from the root to all parts of plant.
2. substance can be poured, and it takes the shape of the container in which it is placed.
3. A person needs more when making physical effort or practicing sports activities.
4. A change of a substance leads to the formation of new substances.
5. A group of interconnected food chains is known as a

9

Mention one use for each of the following:

1. Thermometer :
2. Copper :

10

Look at the opposite figure, then answer:

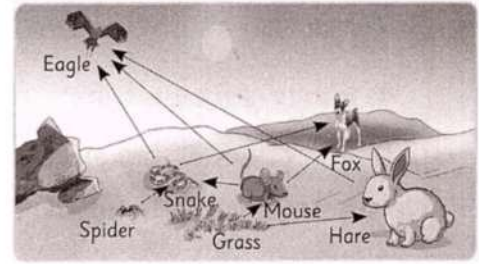
1. The figure expresses the process.
(predation - decomposition)
2. The prey and predator in this food chain are
(consumers - producers)



11

Look at the opposite figure, then answer:

1. The figure expresses ecosystem .
(deserts - tropical forests)
- 2 . The figure represents a model for a
(food chain - food web)
3. Describe what would happen if grass was removed from this ecosystem .



12

Classify the following into chemical and physical changes:

1. Making a chair from wood.
2. Burning a piece of paper.

تقدر تحضر البث المباشر علي يوتيوب لحل الملزمة في المواعيد الاتية بالترتيب:

بث مباشر المراجعات النهائية للصف الخامس الابتدائي ساينس علي قناة مستر احمد الباشا علي يوتيوب :

1. البث الأول (السبت 2022/12/24) الساعة 7 م
2. البث الثاني (الثلاثاء 2022/12/27) الساعة 7 م
3. البث الثالث (السبت 2022/12/31) الساعة 7 م
4. البث الرابع (الثلاثاء 2023/1/3) الساعة 7 م

بث مباشر اضافي :

- الإثنين 2023/1/9 الساعة 4 م
- الثلاثاء 2023/1/10 الساعة 4 م

**ساعة البث المباشر ادخل علي يوتيوب واكتب في البحث (مستر احمد الباشا)
وادخل على القناة والبث دائما في اول نتيجة تظهر لك ولا تنسي والاشتراك في
القناة**

Mr.Ahmed Elbasha

MrAhmedElbasha • 657@

Science / احلى قناة لطلاب / احمد الباشا لشرح جميع مناهج السانيس لغات.



Model Answer

*(1) Choose the right answer:

1. C	7. D	13. B	19. D	25. C	31. B	37. A	43. C	49. D	55. C	61. B	67. A
2. A	8. C	14. A	20. D	26. C	32. C	38. C	44. C	50. C	56. C	62. A	68. B
3. C	9. D	15. C	21. C	27. B	33. C	39. B	45. C	51. A	57. C	63. D	69. C
4. C	10. A	16. D	22. C	28. D	34. C	40. B	46. B	52. A	58. C	64. B	
5. C	11. C	17. B	23. C	29. D	35. C	41. B	47. C	53. D	59. C	65. B	
6. B	12. D	18. B	24. B	30. D	36. B	42. C	48. A	54. B	60. C	66. B	

*(2) Complete the following using the words between the brackets:

1. Grasses	9. Soil	15. Measuring tape	21. Oxygen	28. Drought	36. Less density
2. Cold	10. White	16. Particles	22. Thermometer	29. 100°C	37. First consumer
3. Filter	11. Producer	17. Prey	23. Slower	30. Motion	38. Physical state
4. Benefit	12. Desert	18. Sand and water	24. Carbon dioxide	31. Destroy	39. Filtration
5. Harm	13. Fungi and bacteria	19. Kilogram	25. Decomposer	32. Solids	40. Producer
6. Destroy	14. Physical	20. Decomposer	26. Models	33. Negative	41. Gaseous
7. Benefit			27. Producer	34. Recycling	
8. Go extinct				35. Temperature	

*(3) Write the scientific term :

1. Decomposer	8. Population change	16. Melting point	25. Physical change	35. Photosynthesis
2. Seabird	9. Pollution	17. Freezing point	26. Evaporation	36. Food chain
3. Recycling process	10. Habitat restoration	18. Prey	27. Measuring tape	37. Chlorophyll
4. Coral bleaching	11. Nursery	19. Water	28. Top predator	38. Freezing
5. Ultraviolet rays (UV)	12. Matter	20. Roots	29. Mass	39. Mixture
6. Population	13. Solid state	21. Melting point	30. Condensation	40. Transparent material
7. Microplastics	14. Liquid state	22. Volume	31. Leaves	41. Roots
	15. Thermometer	23. Globe	32. Compound	42. Solid state
		24. Tertiary consumer	33. Stomata	43. Physical change
			34. Mass	

*(4) Complete the following :

1. Mass	5. Indefinite – definite	9. Melts	13. Primary
2. Solid , liquid and gas	6. Pollution	10. Iron – Hard	14. Solid – gas
3. Gas	7. Stomata	11. Balance – thermometer	15. Solid
4. Matter – energy	8. Physical – chemical	12. Ecosystem	16. High

*(5) Put (√) or (X) :

1. (X)	7. (√)	13. (√)	19. (√)	25. (√)	31. (√)	37. (X)	43. (X)
2. (√)	8. (X)	14. (√)	20. (X)	26. (X)	32. (X)	38. (√)	44. (√)
3. (X)	9. (√)	15. (√)	21. (√)	27. (X)	33. (√)	39. (X)	45. (X)
4. (X)	10. (X)	16. (X)	22. (√)	28. (√)	34. (√)	40. (√)	
5. (√)	11. (√)	17. (X)	23. (√)	29. (X)	35. (√)	41. (X)	
6. (√)	12. (X)	18. (X)	24. (√)	30. (X)	36. (√)	42. (√)	

*(6) Cross out the odd word:

1. Feather	4. Light	7. Gold
2. Oxygen	5. Wood	
3. Ice	6. Sunlight	

*(7) Correct the underlined words :

1. Leaves	3. Photosynthesis	6. Leaves	9. Carbon dioxide
2. Floating on water	4. White	7. Roots	
	5. Wood	8. Plants	

☀(8) Give reasons for:

1. Because decomposition process returns nutrients back to the soil again .
2. Because the food and water resources may run out and they will die.
3. Because gentle rain helps producers to grow
4. Because falling of heavy rains may cause floods
5. Because marine microorganisms can make their own food.
6. Because sea turtles can't know the difference between corals and plastic pieces.
7. Because plastic isn't nutritious and it can be toxic and sharp.
8. Restoration process helps in restoring the land and water back
9. Because air has mass and occupy space.
10. To protect them from dust
11. To get energy
12. Because particles of water gain energy and move faster
13. Because helium has less density
14. To protect them from animals getting inside
15. To give leaves green color and absorb sunlight

☀(9) What happens if:

1. Dead things would build up, like the trash in landfills
2. The number of primary consumers will decrease.
3. Primary consumers will die
4. Food and water resources will run out and disappear
5. The numbers of prey decrease
6. Producers will grow and the desert ecosystem is improved
7. The desert ecosystem is destroyed
8. Water will take the shape of the container
9. Ice will be changed from the solid state into the liquid state
10. The speed of the particles will increase and they will move very freely
11. The magnet will attract them
12. The speed of particles will increase
13. It can't absorb sunlight
14. The temperature will decrease

☀(10) Matching:

- | | | | | |
|----------|------|------|------|------|
| 1 | 1- c | 2- a | 3- d | 4- b |
| 2 | 1- d | 2- e | 3- b | 4- a |
| 3 | 1- d | 2- c | 3- a | 4- b |
| 4 | 1- b | 2- a | 3- c | |
| 5 | 1- b | 2- c | 3- a | |
| 6 | 1- b | 2- c | 3- a | |
| 7 | 1- b | 2- a | 3- d | 4- c |
| 8 | 1- c | 2- b | | |
| 9 | 1- c | 2- d | 3- a | |

☀(11) Try to answer

1

- a. grass b. secondary c. eagle d. die

2

- a. E b. secondary c. B

3

- a. coral bleaching b. No c. increase the temperature of water

4

- 1- shelter 2- overfishing 3- extinction 4- predator 5- toxic

5

- 1- liquid 2- space 3- solid - gas 4- particle

6

- 1- Physical 2- Odor 3- rough 4- chemical

7

- 1- (X) 2- (✓) 3- (X) 4- (X)

8

- 1- Xylem 2- Liquid 3- energy 4- chemical 5- food web

9

- 1- to measure the temperature of objects
2- to make electric wire

10

- 1- predation 2- consumer

11

- 1- desert 2- food web 3- the hare and rat will die

12

- 1- Physical change 2- Chemical change

Final revision – questions

Complete the following sentences using the words below:

1. Water can change from the liquid state to state by increasing its temperature.
2. The distance between particles of water is very small in case of its state.
3. The movement of particles of matter increases in case of and processes.
4. By decreasing the temperature of water vapor, it releases energy and changes into water.
5. Salty water is a mixture that consists of salt which is a state of matter and water which is a state of matter.
6. When two substances combine and form a new substance, this new substance is called a
7. To separate mud from salty water we can use process.
8. To separate salt from salty water we can use process.
9. When we heat an ice cream, it and becomes liquid.
10. Melting process occurred by the temperature of the matter.
11. When we keep some of ice cubes in a low temperature, they don't
12. When ice is melted, it is changed from state to state.

13. Iron is a state of matter that has definite and
14. The state of matter which has definite volume and take the shape of container is the state of matter.
15. Air is considered as an example of state, because it takes the and the of container.
16. The distance between particles of solid matter is very
17. When an amount of a liquid is heated, the speed of its particles will
18. We can separate dusts from water by using process.
19. Cutting a paper into pieces is considered as a change, while burning it is considered as a change.
20. Making salad doesn't produce substance.
21. The reaction between some metals and gas causes loss of their shining, and this reaction is considered as a change of matter.
22. Melting of wax is a change, while burning of wood is a change.
23. The change in the structure of the original matter producing a new matter is known as change.
24. Boiling of water to form water vapor is considered as a change.

25. Digestion of food forms a new which has new
26. Making yoghurt from milk is a change.
27. Changing the color of iodine and starch mixture is a change, while changing the color of water and food color mixture is a change.
28. Helium isn't flammable, this property is considered as property.
29. We can use helium gas to fill blimps, because it's lighter than
30. Helium isn't or, so it's considered as a safe gas.
31. The ability of copper to be stretched, is from properties of copper.
32. Cooking pans can be made of copper because it's good conductor of, while electrical wires can be made of copper because it's good conductor of
33. Matter is anything that has and occupies space.
34. Matter can exist in states that are , and
35. Matter can be described by , or
36. The of particles inside matter can describe its state.
37. The particles inside move very freely.

38. Light and sound are not , but they are considered forms of
39. and are examples of gaseous states.
40. Water has shape and size.
41. Some matters are very small and we cannot see them, such as or
42. can be poured in a container and it takes
43. Producers can make sugar which is rich in energy through process.
44. Organisms that return nutrients to the soil again are
45. The tiger that feeds on the deer is called a predator, while the deer called
46. An organism that feeds on plants directly called
47. Decomposition process takes place on land as well as under
48. Organisms that feed on the remains of dead animals and can be added at the end of the chain called
49. The hawk feeds on the snake that feeds on frogs; Therefore, the hawk is considered as

50. consists of living things and non-living things.
51. Decomposition process done by two types of living organisms, which are and
52. is a process through which humans can make new products from waste materials.
53. Snails, earthworms and slugs are considered as while vultures, crabs and cockroaches are considered as
54. organisms that break down the remains of dead plants and animals into nutrients that return to the ecosystem.
55. of the energy in dead prey are recycled to the soil.
(10% - 90%)
56. is a natural recycling factory.
(Photosynthesis – Decomposition)
57. Corals in the marine food web are considered as
(consumers – producers)
58. is/are considered a healthy ecosystem.
(Coral – Coral reefs)
59. Rabbits die quickly when disappear from the ecosystem.
(hawks – grasses)
60. water is suitable for microorganisms.

(Cold – Warm)

61. Corals the seawater to get their food.
(absorb – filter)

62. Micro-plastics are very harmful as they are not
.....
(toxic – nutritious)

63. A long food chain has a great number of
(producers – consumers)

64. Gentle rain may the desert ecosystems.
(benefit – harm)

65. Habitat loss may the ecosystems.
(benefit – harm)

66. Heavy rain may the desert ecosystems.
(improve – destroy)

67. Habitat restoration may the ecosystems.
(benefit – harm)

68. of the energy in dead prey are transferred
to predators.
(10% - 90%)

69. Habitat loss for any living organism make them
.....
(go extinct – survive)

70. Decomposers recycle nutrients to
(soil – air)

71. Coral bleaching means the coral color turns to
(red - white)

72. Algae in the marine food web are considered as
(consumers – producers)

73. The amount of rainfall has a strong effect on the ecosystem.
(marine – desert)

(freezing – increase – water - temperature – decrease – particles – melting)

1. When a chocolate cube is exposed to sun rays, its temperature will and it will become liquid.
2. Matter can be changed from one state to another by changing its
3. When we put a bottle containing water in freezer its temperature will and becomes solid.
4. Solid state is turned into liquid state by process.
5. Liquid state is turned into solid state by process.

6. By changing the temperature of matter, its speed will change.
7. 0°C is the freezing point of

(the same – mixture - mass - compounds – color - properties – changed)

1. The mass of a mixed substance will not be changed during formation of , but their properties will be changed.
2. The mass of salt in salty water will be after the mixture is formed.
3. By adding iodine to starch, their will change into dark blue forming a new compound.
4. By mixing salt with pepper, a is formed which has no change in the and of its components.
5. By adding baking soda to vinegar, the properties of the formed substance will be

(salt – filtration – energy – marine – fresh - oceans – expensive – seas)

1. We can drink water, so we cannot drink the water of and

2. We can remove seaweed, shells and fish from ocean's water by using process.
3. Among the problems of desalination process is that it requires a lot of and it is very process.
4. After desalinating water, the water that is pumped back to oceans contains very large amount of which can harm the life.

(experiments – volume – length – satellites – speed – fossils)

1. To build a house, architects must measure the and width of walls before building walls.
2. Bakers use the measuring cup to measure the of oil during making cakes.
3. Marine biologists can measure the of sound of whales in oceans.
4. Paleontologists must measure the size and shape of to identify them.
5. Measurements of scientists must be accurate during doing their
6. Cartographers use information that are received from to create maps of the Earth's surface.

Write the scientific term of each of the following:

1. A gas taken from the air by leaves to help the plant to make its own food. (.....)
2. A liquid substance that plants, animals and human need to survive. (.....)
3. A part of the plant that carries water and nutrients from the roots to the leaves. (.....)
4. The gas which is released from plants during photosynthesis. (.....)
5. It is a process of transporting seeds from one place to another. (.....)
6. A part of the plant that is responsible for the reproduction process. (.....)
7. The source of energy that the plant use to make photosynthesis. (.....)
8. The process by which plants make their own food by using the energy of sunlight. (.....)
9. Parts of the plant where sunlight allows carbon dioxide to combine with water during photosynthesis process. (.....)
10. Vessels in plant through which water and nutrients move up from roots to leaves. (.....)
11. Narrow holes spread on the surface of plant's leaves that allow gases to come in and out the plant. (.....)

12. The gas that the plant needs to make photosynthesis process. (.....)
13. A substance that is produced from the plant during photosynthesis process and provides it with its needed energy. (.....)
14. Small structures in the plant's roots that increase the absorption of water and nutrients from the soil. (.....)
15. A part of the plant that fix it in the soil. (.....)
16. A part of the plant that supports its leaves and flowers. (.....)
17. The kind of plant's stem in vines. (.....)
18. The stems that are extended above and along the ground. (.....)
19. A plant that has a tuber stem. (.....)
20. It is found in plant's leaves that gives them green color and absorbs energy from the sunlight. (.....)
21. Tubes in the plant that transport food materials from the leaves to other parts of the plant. (.....)
22. A gas produced during photosynthesis and is needed for respiration of living organisms. (.....)
23. A type of sugar produced by the plant during photosynthesis process. (.....)
24. Blood vessels carry blood from the heart to all body parts. (.....)

25. Blood vessels carry blood from the body parts and return it back to the heart. (.....)
26. The human body system that is responsible for transportation of blood and other fluids throughout the body. (.....)
27. A system of tubes through which water, nutrients and plant food are carried all over the plant. (.....)
28. Parts of the plant that are responsible for reproduction. (.....)
29. The process of producing new plants. (.....)
30. A community that contains living organisms and nonliving things. (.....)
31. The process that takes place inside plants through which we can get oxygen. (.....)
32. It is a form of energy that changes into chemical energy during photosynthesis process. (.....)
33. A device that is used to measure the height of a boy. (.....)
34. A device that is used to measure the temperature of milk. (.....)
35. It is the primary source of energy for all living organisms on the Earth. (.....)

36. A type of living organisms that can produce its own food by absorbing sunlight. (.....)
37. The sugar that is formed inside plants during photosynthesis process. (.....)
38. The gas that is present in air and necessary for the formation of plant food. (.....)
39. The gas that is produced from photosynthesis process. (.....)
40. Living organisms that both humans and animals need to survive. (.....)
41. A group of living organisms that can produce their own food. (.....)
42. A group of living organisms that can live on decaying organisms. (.....)
43. It is a process through which decomposers can recycle nutrients back into the soil. (.....)
44. It is a model that shows one linear set of feeding relationships and energy flow between living organisms. (.....)
45. The consumer that hunts and eats another animal. (.....)
46. It is a process through which the nutrients found in dead organisms' bodies return back to the ecosystem. (.....)

45. They are organisms that feed on dead organisms' bodies and break them down into smaller pieces.
(.....)
46. They are organisms that break down the remains of dead plants and animals into nutrients that return to the ecosystem.
(.....)
47. It is a process through which humans can make new products from waste materials.
(.....)
48. They are scientists who work on restoration projects to have a stable environment for plants to survive.
(.....)
49. Organisms that use human clothes or animal bodies or even wind to disperse their seeds to new habitats.
(.....)
50. The suitable ecosystem for plant-community ecologists to do their researches.
(.....)
51. A way of life that coastal communities near the reefs have adopted.
(.....)
52. The animal that is eaten by another animal.
(.....)
53. It is from the most diverse marine ecosystems on Earth.
(.....)
54. It is the harms that happen to air, water and soil due to human activities.
(.....)

55. A human activity that leads to decreasing the number of fish and affecting many marine food webs. (.....)
56. They are consumers that exist at the top of food chains. (.....)
57. They are consumers which feed on secondary consumers. (.....)
58. They are living organisms that include bacteria and fungi, which return energy back to the soil. (.....)
59. It transfers between animals in a food web, to help them do their activities and survive. (.....)
60. It is the number of organisms of one type of species living in an area. (.....)
61. Any increase or decrease in the number of organisms. (.....)
62. Flying living organisms that build their nests on the top of mountain cliffs and dive deeply into the sea to eat. (.....)
63. They are organisms that are too small for people to see with only their eyes. (.....)
64. It is a condition in which coral reefs turn completely into white. (.....)
65. They are rays coming from the sun that break down plastic products into microplastic. (.....)

66. Small pieces of plastics in the size of rice grains and they cause harms to marine organisms.
(.....)
67. It is a process that people can do for plastic waste materials instead of throwing them in seas and oceans.
(.....)
68. They are projects in which scientists, engineers and citizens try to repair all parts of a habitat.
(.....)
69. It is an area in the sea, where scientists take care of small pieces of coral until they grow up.
(.....)
70. A process of returning a habitat back to its natural state before harm was done.
(.....)
71. Anything that has a mass and a volume.
(.....)
72. A property of matter by which we can distinguish between hot and cold objects. (.....)
73. The state of water after its freezing. (.....)
74. The state of matter that has definite volume and shape. (.....)
75. The state of matter that is characterized by having a definite volume but it doesn't have a definite shape.
(.....)
76. Substances that take the shape and the volume of their containers. (.....)

77. The state of matter that has a lot of spaces between its particles. (.....)
78. The tool used to measure the length of a wall. (.....)
79. A state of matter that has a fixed shape. (.....)
80. The building units of matter. (.....)
81. A device used to examine objects that are too small to be seen with the naked eye. (.....)
82. A state of matter that its particles vibrate around their place. (.....)
83. A state of matter that its particles move faster than solids and have a definite volume. (.....)
84. The state of water after its heating for high temperatures. (.....)
85. A device used to examine one tiny particle such as a blood cell. (.....)
86. A model of the whole world that is made in the shape of a large ball. (.....)
87. A copy that is similar to a real thing which we cannot observe with our eyes. (.....)
88. A material that is used to build the roofs of cold weather homes. (.....)
89. A material that is used to build the roofs of desert homes. (.....)

90. The property of matter which is measured by the measuring cup. (.....)
91. The property of matter which is measured by the balance. (.....)
92. The property of matter which is measured by the tape measure. (.....)
93. The properties of matter which you can observe them by using your five senses. (.....)
94. The properties of matter which can be observed and measured by the changes that happen when the material interacts with other materials. (.....)
95. It is the amount of space that matter takes up. (.....)
96. It is a measure of the amount of matter. (.....)
97. It is a measure of how quickly the particles in a matter are moving. (.....)
98. It is a light gas which is used in filling blimps. (.....)
99. The ability of material to transfer heat and conduct electricity. (.....)
100. A matter which is used in making gloves because it is waterproof and flexible. (.....)

101. The tool that is used by bakers to measure the volume of water during making bread.
(.....)
102. The scientists who measure the size and shape of fossils.
(.....)
103. They are responsible for measuring and mapping Earth's surface.
(.....)
104. It is a tool which can give us information about climate and topography.
(.....)
105. It is a process by which a matter is changed from solid to liquid state.
(.....)
106. The state of matter in which matter has definite volume and shape.
(.....)
107. The state of matter in which matter has definite volume and takes the shape of its container.
(.....)
108. The state of matter in which matter takes the volume and the shape of its container.
(.....)
109. They are changes in matter which are usually reversible and don't affect its structure.
(.....)
110. It is the process by which the particles of matter gain energy and changes from solid to liquid state.
(.....)

111. It is the process by which the particles of matter lose energy and changes from liquid to solid state.
(.....)
112. The state of water when its temperature is between 0°C and 100°C.
(.....)
113. It is the process by which matter changes from liquid state to gas state.
(.....)
114. It is the process by which matter changes from gas state to liquid state.
(.....)
115. It is the substance that consists of more than one matter which don't have any physical or chemical change in their properties.
(.....)
116. A matter that is formed when two or more materials combine chemically.
(.....)
117. The process of removing salt from salt water.
(.....)
118. The process which can be used to remove any large materials from sea and ocean water.
(.....)
119. The process which can be used to separate salt and minerals from salt water of seas and oceans.
(.....)

Correct the underlined words:

1. **Respiration** process helps the plant to make its own food.
(.....)
2. **Oxygen** gas is absorbed by plant's leaves to make
photosynthesis process. (.....)
3. When a plant is placed in sunlight, its leaves become **pale**
green. (.....)
4. Humans can get their food from **air** and animals.
(.....)
5. Plant's **leaves** absorb water and nutrients from the soil.
(.....)
6. There are smaller vessels that connect **the root** to the
leaves. (.....)
7. There are tiny holes on the **stem** to allow gases passes into
the plant. (.....)
8. Stomata allow **water** to move into and out of the plant.
(.....)
9. Plant's **leaves** help it to be fixed in the soil. (.....)
10. The plant can absorb more water and nutrients from
the soil by the help of **xylem** that are found in the roots.
(.....)
11. Tree trunks are **climb** stems. (.....)
12. Potato plant's stems called **runners** that extend
underground. (.....)
13. The stems that extend above and along the ground
are called **tubers**. (.....)

14. Most flowers have wood stems. (.....)
15. Animals and people can't live without carbon dioxide gas to breathe. (.....)
16. The leaves of pine trees are flat and wide. (.....)
17. Chlorophyll in plant's roots absorbs energy from the sunlight. (.....)
18. Xylem tubes inside the leaves transport food materials downward from the leaves to other parts of the plant. (.....)
19. Flowers of plants produce root hairs that help the plant to reproduce. (.....)
20. Blood rich with oxygen gas is carried by veins from the heart to the body parts. (.....)
21. Human circulatory system consists of the lungs and blood vessels. (.....)
22. Each of xylem in plants and veins in human are two-ways vessels. (.....)
23. Phloem tubes carry water and nutrient from the roots to the leaves. (.....)
24. Veins carry blood rich in oxygen and nutrients. (.....)
25. During photosynthesis process, light energy is transformed into sound energy. (.....)

26. Plants make glucose during **respiration** process that provides them with energy. (.....)
27. Coconut seeds disperse by **wind**. (.....)
28. Burdock seeds are **light** seeds. (.....)
29. Tomato and **coconut** seeds being eaten by animals and come out with their stool. (.....)
30. Chlorophyll in plant's **roots** absorbs energy from the sunlight. (.....)
31. Due to rising of water temperature, coral reefs turn completely into **green**. (.....)
32. Producers need the energy of **moonlight** to make photosynthesis process. (.....)

Put (✓) or (X):

1. Balance can be used to measure the length of your friend. ()
2. Strong stones protect the roofs of desert homes from dust and dirt. ()
3. We may need to measure more than one property to identify an unknown matter. ()
4. The attraction of different materials to the magnet is from chemical properties of matter. ()
5. The length of wood bar can be measured by a ruler. ()
6. Ceramic tiles protect desert home roofs from dust and dirt. ()

7. Air is a matter so it has mass. ()
8. The ability to rust is one of the physical properties of matter. ()
9. Cartographers can measure the mass of the Earth planet. ()
10. Heavy rain improves the desert ecosystem more than gentle rain. ()
11. Energy remains in an ecosystem but it's transferred between its components. ()
12. Living organisms always need non-living things in the ecosystem to survive. ()
13. Coral reefs lose their colors when the water temperature decreases. ()
14. A primary consumer could be a predator in its food chain. ()
15. Humans are both primary and secondary consumers. ()
16. The restoration process always takes a little time. ()
17. When a plant dies, consumers may not be found in this short food chain. ()
18. Overfishing is one of the most natural events that impact the marine ecosystem. ()
19. Algae enter the tissue of corals when the water temperature increases. ()
20. If the grass is removed from the desert, hawks will die quickly. ()

21. It is better to use single-used plastic forks to reduce plastic pollution. ()
22. Palau work with fishers to make sure they are not overfishing in coral reefs. ()
23. Heavy rain in the desert causes the growth of more producers. ()
24. The number of prey increases when the number of predators decreases. ()
25. Increasing the number of primary consumers may make producers disappear. ()
26. Secondary consumers may migrate if the producers are removed from the ecosystem. ()
27. Microorganisms recycle back the important elements to water. ()
28. When the water becomes warm, seabirds have to move for another cooler area. ()
29. Habitat loss may cause extinction for any species of living organisms. ()
30. Using plastic grocery bags is better than using cloth bags. ()
31. Sea turtles and corals are always in danger due to plastic pollution. ()
32. The state of matter can't be changed from one form to another. ()
33. Matter exists everywhere around us in nature. ()

34. The particles in ice move more freely than in water. ()
35. Water always takes the shape of the container that it is poured in. ()
36. Matter consists of tiny moving particles. ()
37. Water vapor has no texture and it is a visible matter. ()
38. Gases completely fill a closed container, such as when you blow a balloon. ()
39. Ice melts into water by cooling it. ()
40. Water has indefinite shape and size. ()
41. Two objects can take up the same space at the same time. ()
42. If producers were removed from an ecosystem, the consumers will need to move away. ()
43. Overfishing is one of the climate changes that affects the marine ecosystem. ()
44. What is happening on land doesn't affect what is happening in marine ecosystem. ()
45. It is better to recycle the waste materials than throwing them in rivers and seas. ()
46. Food webs don't change if their surrounding environments get changed. ()
47. If we introduce a new predator to an ecosystem, this ecosystem will be affected. ()
48. If there is a heavy rain in a desert ecosystem, it will be harmed. ()
49. Zooplankton can make their own food by photosynthesis process. ()

50. In a marine food web, there are many top predators like sea star and sea urchin. ()
51. Top predators are decomposers that present at the top of food chains. ()
52. Ecosystem can be affected by climate changes, pollution and human activities. ()
53. Most of living organisms are prey for some animals and also predators for others at the same time. ()
54. The Sun produces energy that decomposers use to make their food. ()
55. The soil fertility depends on decomposers. ()
56. Any food chain can be formed of producers only. ()
57. A desert food chain doesn't contain any type of fish or sharks. ()
58. Energy transfers when a prey loses energy to the predator which feeds on it. ()
59. Forest fire negatively affects the marine organisms. ()
60. Pollution affects both of food resources and animal habitats. ()
61. Forest fire produces smoke only that covers the grasses. ()
62. Death of an animal due to pollution affects all other levels of the food web. ()
63. If the climate change is unsuitable, the population of a species decreases. ()
64. In an ecosystem, all species depend on other species for survival. ()

65. Seabirds eat small fish that swim near the water surface. ()
66. Microorganisms are producers that small fish feed on to get energy. ()
67. Healthy habitats provide living organisms with clean air, healthy food and water. ()
68. The flow of energy in food webs is not affected when the natural habitats are destroyed. ()
69. Human activities impact the nonliving things in an ecosystem. ()
70. Healthy coral reefs have no benefit to fish but they are important for tourism. ()
71. When the temperature of seawater decreases, coral reefs receive more algae. ()
72. Coral bleaching occurs as a result of throwing plastic in seawater. ()
73. Living organisms in seas and oceans cannot differentiate between real food and plastic waste materials. ()
74. Jellyfish can get its energy by eating the sea turtle. ()
75. UV rays coming from the Sun, break down plastic wastes into microplastics. ()
76. Coral reefs filter the seawater to get their needed food. ()
77. The polluted water has a positive effect on coral reefs. ()

78. If coral reefs are destroyed, many marine food chains will be destroyed. ()
79. Primary consumers and predators in seas and oceans are negatively affected by rising water temperature. ()
80. Coral reefs depend on butterflyfish for food and shelter. ()
81. Coral reefs are considered as a suitable habitat for sharks. ()
82. Removing plants negatively affects consumers in an ecosystem. ()
83. Restoration projects are used to find out solutions for increasing pollution. ()
84. It is better to keep natural resources healthy than applying restoration projects. ()
85. Citizens must share in returning a habitat back to its healthy condition before harm was done. ()
86. Nursery is the natural habitat in the sea, in which coral reefs continue growing and reproducing. ()
87. People near the coastal areas must replace plastic bags with cloth one. ()

Choose the correct answer :

1. From the physical properties which can't be measured by using a special tools is
a) volume c) mass
b) color d) length
2. Which of the following homes have a flat roofs ?
a) Desert homes only.
b) Cold weather homes only.
c) Desert homes and tropical rainforest homes.
d) Desert homes and cold weather homes.
3. When the particles of a matter move with high speed, its increases.
a) Mass. c) Volume
b) Length. d) Temperature
4. The used materials in making cooking pans are
a) copper and glass. c) copper and helium
b) glass and helium. d) copper and wood
5. Both are sinking in water and attracted to the magnet.
a) Stone and iron nail
b) Paper clip and iron nail
c) Paper clip and wood spoon
d) Plastic ruler and wood spoon
6. 1 kilogram of iron = 1 kilogram of cotton. This sentence means that both materials are equal in
a) mass only.

- b) volume only.
- c) mass and temperature.
- d) volume and mass.

7. Mass is a measurement of the

- a) Odor of flower.
- b) Length of wood bar.
- c) amount of flour
- d) color of apple

8. We can define volume as the amount of that matter takes up.

- a) space
- b) time
- c) temperature
- d) water

9. From the people which use balances in their works are

- a) cartographers.
- b) bakers
- c) paleontologists
- d) space scientists

10. are both primary and secondary consumers.

- a) Plants
- b) Humans
- c) Fungi
- d) Predators

11. In any food chain, the primary consumers may be

- a) predators only
- b) prey only
- c) predators or prey
- d) green plants

12. Decomposers can get their energy from

- a) living things
- b) soil and water
- c) dead organisms
- d) the sun

13. The relationship between is "predator and prey" relationship.

- a) Algae and corals.
- b) Frogs and locusts

- c) rabbits and carrots
- d) eagles and fungi

14. The tertiary consumer does not exist in food chain
(.....)

- a) Algae → coral → parrotfish → shark
- b) Grass → mouse → snake → eagle
- c) Grass → locust → frog → snake
- d) Carrot → rabbit → fox → bacteria

15. In this food chain (Grass → rabbit → hawk), if the rabbits disappear, will increase.

- a) Grass
- b) a and b
- c) hawks
- d) no correct answer

16. In this food chain (Acacia tree → giraffe → Lion).
The symbol (→) represents the flow of

- a) pollution
- b) force
- c) energy
- d) motion

17. Primary consumers are the link in their food chain.

- a) first
- b) second
- c) third
- d) final

18. Healthy desert ecosystems always require from time to time.

- a) strong winds
- b) heavy rain
- c) gentle rain
- d) floods

19. Which of the following examples causes the greatest damage to an ecosystem?

- a) Grass removal
- c) predators increase

b) Predators extinction d) prey increase

20. Heavy rain may the desert ecosystem.

- a) improve c) harm
- b) benefit d) restore

21. If the grass is removed from an ecosystem, will die first.

- a) primary producers
- b) primary consumers
- c) secondary consumers
- d) decomposers

22. When a predator feeds on prey, is transferred between them.

- a) water c) motion
- b) blood d) energy

23. When the number of predators increases, the number of decreases.

- a) producers c) decomposers
- b) other predators d) prey

24. Human activities and pollution in impact the marine ecosystem quickly.

- a) cities c) deserts
- b) forests d) islands

25. All the following examples represent bad human activities, except

- a) Overfishing c) floods
- b) air pollution d) plastic pollution

26. Nutrients are recycled back into the ecosystem by the
- a) predators.
 - b) prey.
 - c) consumers
 - d) decomposers
27. In most marine food webs, are considered producers.
- a) grass.
 - b) algae
 - c) bacteria
 - d) small fish
28. All the following have bad impact on the marine ecosystem, except
- a) island pollution
 - b) heavy rain
 - c) plastic pollution
 - d) overfishing
29. If the number of primary consumers increases so much, will disappear.
- a) producers
 - b) decomposers
 - c) secondary consumers
 - d) tertiary consumers
30. All the following organisms can make their own food, except
- a) grass
 - b) worms
 - c) algae
 - d) microorganisms
31. If the climate change was suitable, the living organisms will
- a) die
 - b) migrate
 - c) survive
 - d) extinct
32. live on the tops of mountain cliffs and depend on fish as their main source of food.
- a) Eagles
 - c) owls

- d) seabirds

33. are/is considered the producers in the marine food web.

- d) Grass

34. The migration of microorganisms to a new habitat is due to the increase of

- d) the number of fish

35. Increasing water temperature may cause all the following, except

- d) death of some seabirds

36. If the turtle sees a plastic piece, the turtle will

- d) digest it

37. is one of the best ways to protect the marine ecosystem.

- d) Recycling plastics

38. Micro-plastics are formed by the effect of the

- d) soil

39. is an area in the ocean where the small pieces of corals are nurtured.
- a) Coral reefs
 - b) The nursery
 - c) Protectorate
 - d) Garden
40. is one of the ways done by coastal communities to reduce plastic pollution.
- a) Replacing wooden forks with plastic ones
 - b) Using grocery plastic bags
 - c) Using single-used plastics
 - d) Using cloth bags
41. All the following are affected by pollution, except
- a) living organisms as human, plants and animals
 - b) non-living things as air, water and soil
 - c) all components of the ecosystem
 - d) dead organisms only
42. If the number of, the grass will increase in the ecosystem.
- a) Decomposers decreases
 - b) producers increases
 - c) Primary consumers increases
 - d) primary consumers decreases
43. are the top predators in their food chain.
- a) Frogs
 - b) Birds
 - c) Alligators
 - d) Butterflies
44. Decomposers directly benefit from and complete the food chain cycle.

- a) water and fish
- b) air and birds.
- c) dead organisms
- d) soil and dead producers

45. All the following organisms depend on another organism to get their energy, except

- a) predators
- b) prey
- c) green plants
- d) b and c

46. A population change refers to the increase or decrease in

- a) water and food resources
- b) the weather temperature
- c) number of living organisms
- d) the water temperature

47. Which matter has a definite shape?

- a) Water
- b) ice
- c) oil
- d) air

48. can be poured in any container.

- a) Oxygen
- b) juice
- c) ice
- d) air

49. Anything that has mass and occupies space is called

- a) energy
- b) force
- c) matter
- d) weight

50. Any matter exists in state(s).

- a) One
- b) two
- c) three
- d) four

51. All the following examples represent solid states, except

- a) juice
- b) feather
- c) ice
- d) rock

52. All matter around us consist of
a) Cells b) particles c) nutrients d) proteins
53. Matter can be described by
a) Hardness b) color c) shape d) all the previous
54. Which of the following examples isn't a matter?
a) Bird's feathers c) Empty cup
b) Cup of water d) Bird sound
55. is considered an invisible matter.
a) Milk b) air c) father d) sound
56. Cold milk and hot tea are similar in
a) Color b) temperature c) taste d) state
57. are different matters but they exist in the same state.
a) Water and ice c) Milk and juice
b) Wood and air d) Air and water
58. are same matters, but they exist in the different states.
a) Wood and brick c) Oil and tea
b) Oxygen and air d) Ice and water vapor
59. Tiny particles inside move very freely.
a) Water b) air c) wood d) ice
60. You can measure your height using a
a) Balance c) ruler
b) Thermometer d) metric stick

62. Thermometer can be used to know the
of water.
a) Shape b) color c) temperature d) weight
63. Water is described by all of these properties, except
.....
a) We can pour it
b) it occupies space
c) It has a definite shape
d) It takes the shape of the container
64. Which of the following matters has no texture?
a) Feather b) oxygen c) water d) ball
65. has a definite size and an indefinite
shape.
a) Air b) ice c) water d) wood
66. Some matters are very small and we cannot see
them, such as
a) Water b) germs c) pencils d) insects
67. The model that shows the interactions of food
chains in an ecosystem is called
a) environmental system. c) photosynthesis process
b) food web d) plant transport device
68. An animal that feeds on another animal in the food
chain is known as
a) prey c) decomposer
b) predator d) producer

69. Which of the following organisms helps to restore the fertility of agricultural soils again?
- a) Autotrophic c) Carnivores
b) Decomposer d) Producer
70. is considered a food producing organism.
- a) Fish c) Mouse
b) Human d) Grass
71. Which of the following correctly expresses the energy transfer in the food chain?
- a) sun - rabbit – fox – grass c) sun – grass – rabbit - fox
b) fox – grass – rabbit – sun d) grass – rabbit – fox – sun
72. The deer feed on the grass and the lion feed on the deer, this is an example of
- a) food chain c) food web
b) photosynthesis d) reproduction
73. Which of the following gets its energy from another living organisms?
- a) Fox c) flower
b) Cactus الصبار d) Eucalyptus tree شجرة الكافور
74. gets the energy of sunlight to form its own food.
- a) Consumer c) producer
b) Decomposers d) non-living elements
75. need energy to survive.
- a) Consumers only
b) Decomposers only
c) Producers, consumers and decomposers

d) Consumers and decomposers only

76. Which of the following is considered a decomposer that feeds on the remains of dead organisms?

a) Human and fish

c) Bacteria and fungi

b) fox and rabbit

d) locust and lion

77. The primary source of energy for all living organisms is

a) Moon

c) sun

b) Stars

d) planets

Give Reason:

1- Roots have important role in the photosynthesis process.

.....

.....

2- Photosynthesis process is important for plants to survive.

.....

.....

3- Some plants don't need soil as a basic need.

.....

.....

4- The presence of stomata on the surface of plant's leaves.

.....

.....

5- Green plants can make their own food.

.....

.....

6- Xylem vessels are important for the plant.

.....

.....

7- There is no life on Earth in the absence of plants.

.....

.....

8- Chlorophyll in plant's leaves has an important role in the photosynthesis process.

.....

.....

9- The presence of hair like structure in plant's roots.

.....

.....

10- Flowers are important parts for the plant.

.....

.....

11- Circulatory system has an important role for human to survive.

.....

.....

12- Xylem in plant is a one-way vessel.

.....

.....

13- Seeds dispersal may take place by animal in two different ways.

.....

.....

14- Seeds of maple or dandelion plants can disperse through wind easily.

.....

15- Burdock seed can stick to animal fur.

.....

16- Human needs to eat some animal and plants.

.....

17- Sunlight is important for all living organisms.

.....

.....

18- Consumers depend on producers to get their energy.

.....

19- Soil fertility depends on decomposers.

.....

.....

20- Scavengers must work on dead bodies before decomposers.

.....

.....

21- When the number of one species of consumers in an ecosystem increase, they will die.

.....

.....

22- Death of algae may lead to moving sharks away to another places.

.....

.....

23- Food webs can be destroyed due to pollution.

.....

.....

24- In case of fire forests, animals suffer from difficulty breathing.

.....

.....

25- Coral reefs are important for human communities.

.....

.....

26- Coral bleaching happens when the water temperatures rise.

.....

.....

27- Both of rising water temperature and ingesting microplastics are harmful for coral reefs.

.....

.....

28- It is better to keep natural resources healthy than applying restoration projects.

.....

.....

29- When we remove plants from riverbanks, the floods become more dangerous.

.....

30- Rubber differs from iron.

.....

.....

31- Salt is a matter.

.....

32- Sugar is a solid matter.

.....

33- Wood has definite shape and volume.

.....

34- Oxygen has no definite shape or volume.

.....

35- Particles of a piece of iron are very close to each other.

.....

36- Air has no definite shape or volume.

.....

37- Particles of gases can spread out quickly to fill up any container they put in.

.....

38- Using models to study some scientific concepts.

.....

39- Sometimes we need to use an electron microscope.

.....

40- Both liquids and gases don't have a definite shape and take the shape of their containers.

.....

41- Oil used in cooking is considered as an example of liquid matter.

.....

.....

42- The roof of desert home is made of strong stones.

.....

.....

43- The roof of tropical rainforest home is made of leaves and sticks.

.....

.....

44- Rusting of iron is considered from chemical properties of matter.

.....

.....

45- When the particles of a matter move quickly, its temperature increases.

.....

.....

46- Helium is used to fill balloons and blimps.

.....

47- Human can use helium gas safely.

.....

48- wood and plastic are used in making handles of cooking pans.

.....

49- Architects and builders use tape measure in their work.

.....

.....

50- Bakers use balances and measuring cups in their work.

.....

.....

51- Cartographers create city maps.

.....

52- Ice is turned into water when it is placed in a warm room.

.....

.....

53- When the temperature of ice cubes increases, they will melt.

.....

.....

54- Both melting and freezing processes are considered as physical changes.

.....

.....

55- Formation of water drops when water vapor touches a cold surface.

.....

.....

56- Fruit salad and salty water are considered as mixtures.

.....

.....

57- Filtration process is used to separate soil from water.

.....

.....

58- By adding baking soda to vinegar, the properties of each of them are changed.

.....

.....

59- The components of mixture don't produce a new substance when combining together.

.....

.....

60- Air is considered as a mixture.

.....

61- Making fruit salad is considered as a physical change.

.....

62- Making bread is considered as a chemical change.

.....

.....

63- Formation of a layer with reddish color on the surface of a wet iron wire after a period of time.

.....

.....

64- Formation of a bad odor when milk is left out of the fridge for of a bad odor when milk is left several days.

.....

.....

65- We cannot drink the water of oceans and seas.

.....

.....

What happens if:

1- Plants have no stem.

.....

2- Plants can't get carbon dioxide gas from air.

.....

.....

3- We put a green plant in a dark room for many days.

.....

.....

4- We put a seed of bean in a soil.

.....

5- we put a bean seed in a wet paper towel for more than two months.

.....

.....

6- Stomata of a plant get closed for a long time.

.....

.....

7- Plant's leaves don't contain chlorophyll.

.....

.....

8- The plant doesn't have roots.

.....

.....

9- The plant stop making photosynthesis process for several days.

.....

10- Xylem is removed from the plant structure.

.....

.....

11- Human body contains arteries only without veins.

.....

.....

12- Plants can't produce glucose sugar during the photosynthesis process.

.....

.....

13- Humans don't have circulatory system.

.....

.....

14- We remove the flowers of a plant.

.....

.....

15- There is no sunlight reaches the Earth's surface.

.....

.....

16- A hawk is placed in an ecosystem that doesn't contain any living organisms except plants.

.....

17- All primary consumers disappear from a certain food chain.

.....

.....

18- All types of decomposers are absent from an ecosystem.

.....

.....

19- Throwing big amounts of plastic garbage and waste materials in water.

.....

.....

20- A small lake is exposed to extreme hot climate for several months.

.....

.....

21- The number of secondary consumers in an ecosystem decrease.

.....

.....

22- There is a gentle rain in the desert.

.....

.....

23- There is a heavy rain in the desert.

.....

.....

24- There is a drought in the desert and grass dies.

.....

.....

25- There are many top predators in the food web.

.....

.....

26- The climate change is unsuitable for a population of one type of species.

.....

.....

27- The sea water becomes warm.

.....

.....

28- A habitat is not restored.

.....

.....

29. The number of primary consumers more than the amount of producers.

.....

.....

30. The food resources of the seabirds when the seawater becomes cooler.

.....

.....

31. The coral reefs when the seawater temperature rises.

.....

.....

32. Algae when coral bleaching occurs.

.....

.....

33. An animal species if the community don't apply habitat restoration projects.

.....

.....

34. Water is heated in the kettle for few minutes
(according to the state of water after heating).

.....

35. The shape of water if we put three equal amounts of
water in three different containers.

.....

.....

36. The volume of a coin if we transfer it from a cup to
another cup.

.....

37. Water changes into ice.

.....

38. A liquid change into gas.

.....

39. We try to examine the particles of any substance
with our naked eyes.

.....

40. The speed of particles of an ice cube when it is
exposed to the sun.

.....

41. The size of a balloon when you blow it up.

.....

42. The arrangement of particles of water after freezing.

.....

43. The state of milk if we put small amount of it in the freezer for few hours.

.....

44. The roof of cold weather homes is flat.

.....

.....

45. A piece of paper interacts with fire.

.....

46. The speed of particles of a matter decreases according to its temperature.

.....

47. A magnet is put close to an iron nail and a plastic spoon.

.....

48. A piece of cork is put in water.

.....

49. A blimp is filled with helium gas.

.....

50. Electrical wire is made from plastic instead of copper.

.....

51. We cool some tomatoes (according to their mass).

.....

.....

52. We increase the temperature of some ice cubes.

.....

.....

53. We heat an amount of water.

.....

.....

54. The particles of water when its temperature is decreased below 0°C .

.....

.....

55. A piece of chocolate if it is exposed to sun ray for a period of time.

.....

56. The particles of water when we increase its temperature above 100°C .

.....

.....

57. Salty water when heating it for a long time.

.....

.....

58. The mass and properties of sugar when adding it to an amount of flour.

.....

.....

59. You expose a shiny piece of metal to air (oxygen) for a long period of time.

.....

60. We mix iodine with cornstarch.

.....

.....

61. Oxygen, carbon, and hydrogen are combining together.

.....

.....

Choose from column (B) what suits it in column (A):

Column (A)	Column (B)
1. Iron nail	a.sinks in water and doesn't attract to the magnet.
2. Piece of stone	b.floats on water and attracted to the magnet.
3. Piece of wood	c.sinks in water and attracted to the magnet.
	d.floats on water and doesn't attract to the magnet.

Column (A)	Column (B)
2) Gentle rains	a.Harm the desert ecosystem.
3) Heavy rains	b.Reduces ocean pollution.
4) Overfishing	c.Improve the desert ecosystem.
5) Recycling plastics	d.Destroyes the marine ecosystem.

Column (A)	Column (B)
1) Photosynthesis	a.Causes death or extinction of living organisms
2) Decomposition	b.Is a way that is used to reduce plastic pollution.
3) Restoration	c.Means that the coral color turns to white.
4) Zero plastics	d.Releases oxygen in the air.

5) Habitat loss	e. Is recovering a shelter to animals.
6) Coral bleaching	f. Recycles nutrients to the soil.

Column (A)	Column (B)
1) Matter	a. Is not a matter.
2) Particles	b. Is an invisible form of matter.
3) Sound	c. Exist inside the matter in a continuous motion.
4) Oxygen	d. Exists in three states.

Column (A)	Column (B)
1) solid state	a. Has indefinite shape and definite size.
2) liquid state	b. Has definite shape and size.
3) gaseous state	c. Has indefinite shape and size.

Column (A)	Column (B)
1) thermometer	a. Is used to measure the height of a boy.
2) balance	b. Is used to measure the temperature of hot tea.
3) measuring tape	c. Is used to measure the mass of fruits.

Column (A)	Column (B)
1- Plant	a) are responsible for making the food of the plant.
2- Animals	b) absorb nutrients and water from the soil.
3- Roots	c) must move to get their food.
4- Leaves	d) can make their food by themselves.
5- Veins	e) Transmission of nutrients and water to the plant's leaves.
6- Phloem	f) Allowing the needed air to enter through it.
7- Arteries	g) Transmission of blood that carries carbon dioxide to the heart.
8- Xylem	h) Fixing the plant in the soil.
9- Flower	i) Transmission of food from a plant's leaf to other plant parts.
10- Plant's stem	j) Supporting the plant and connecting the roots to the leaves.
11- Plant's root	k) Transmission of blood rich in oxygen gas and nutrients to all cells.
12- Plant's leaf	l) Responsible for reproduction in plants.

Compare between the following:

	solid	liquid	gas
size			
shape			
texture			
Motion of particles			
Space between particles			

Look at the following picture, then complete the following sentences:

A)



Home (1)



Home (2)



Home (3)

1. Ceramic tiles are used in making the roof of home to protect it from
2. Strong stones are used in making the roof of home to protect it from and
3. Leaves and sticks are used in making the roof of home to protect it from

B)



Tool (A)



Tool (B)

- a. Tool (A) is used to measure the of different matter.
- b. Tool (B) is used to measure the of different matter.

- c. The measuring units that are used to describe the measurement of tool (A) are and
- d. The measuring units that are used to describe the measurement of tool (B) are , and

c)



Tool (A)



Tool (B)



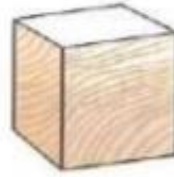
Tool (C)

1. Tool B is made of steel, because it is and
2. Tool C is made of rubber, because it is and
3. Tool A is made of glass, because it is and

Look at the following pictures, then choose the correct answer:



A paper clip
material (A)



A wood cube
material (B)

1. If we put the two previous materials in water, which material sinks?
(material (A) - material (B))
2. If a magnet is put close to the two materials, which material doesn't attract to the magnet?
(material (A) - material (B))
3. We can measure the mass of each material by using a
(ruler – balance_)

Look at the following figures, then complete the following sentences using the words below:

(meter – mass - kilogram – architects – length – bakers)



Figure (1)

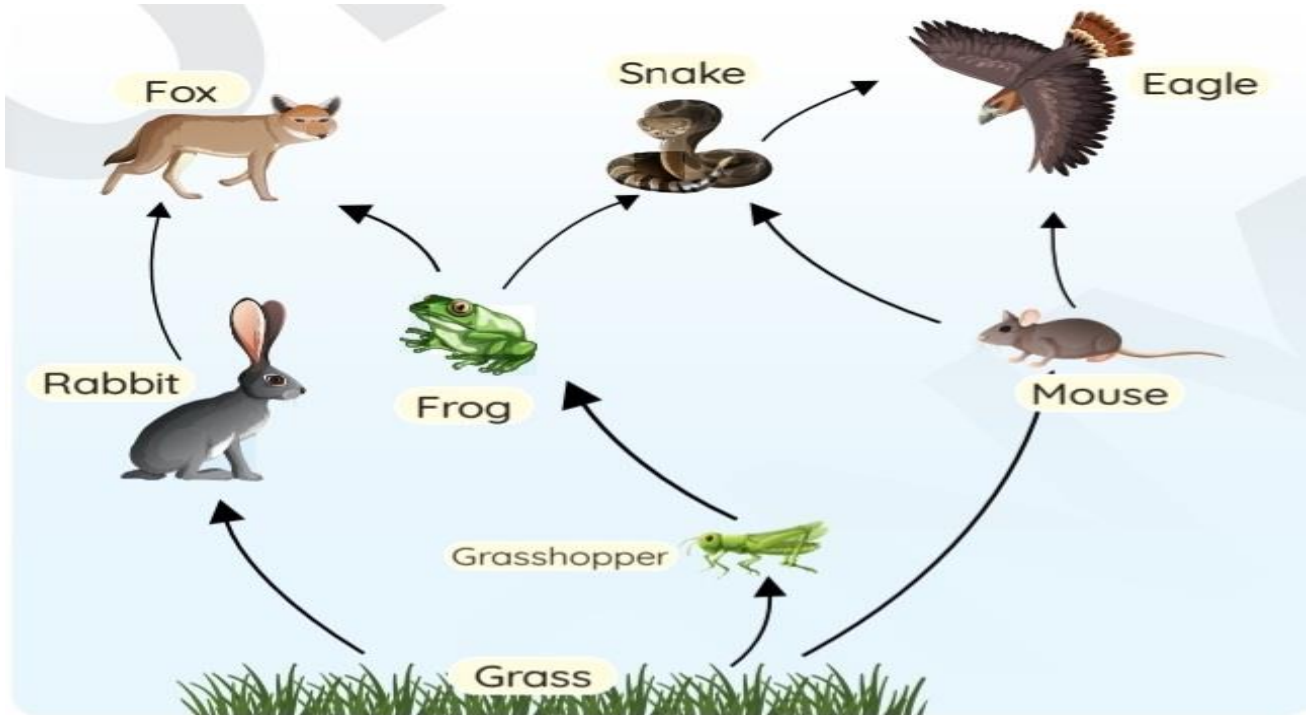


Figure (2)

1. Tool in figure (1) is used to measure and its measuring unit is
2. Tool in figure (1) is used by in their work.
3. Tool in figure (2) is used to measure and its measuring unit is
4. Tool in figure (2) is used by in their work.

Variant questions:

A) Study the following food web, then answer the questions:



➤ **From this food web, complete the following to form three food chains:**

a) → →

b) → → →

c) → → →
→

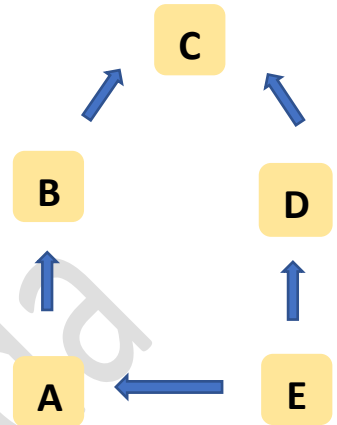
B) Study the following food web, then complete the sentences using the words between the brackets:



- a. If the population of rabbits increases, may disappear. (foxes – grass)
- b. The snake is considered a consumer. (primary – secondary)
- c. The rabbit provides energy to the (eagle – grass)
- d. If the grass is removed, the mouse and rabbit will (migrate – die)

C) Study the following food web, then complete the sentences using the words between the brackets:

- a) Letter () represents the producer.
(A – E)
- b) Letter (B) represents the
consumer.
(primary – secondary)
- c) Letter (C) is the tertiary consumer
when it feeds on letter ()
(B – D)



D) Study the following figure, then answer the questions:

- a. What is the name of this phenomenon?

.....

- b. Is this a healthy ecosystem?

- c. What is the reason of this phenomenon?

.....

.....



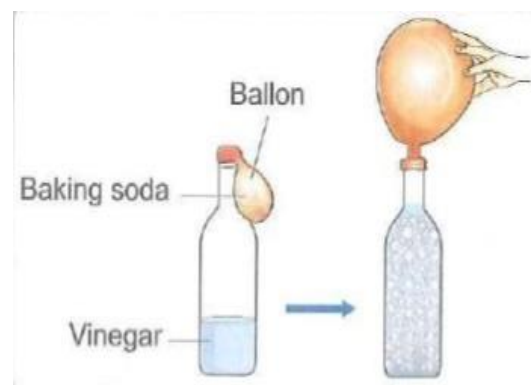
E)As shown in the diagram, the balloon inflates when the baking soda in the balloon is mixed with vinegar. What does cause this to happen?

.....

.....

.....

.....



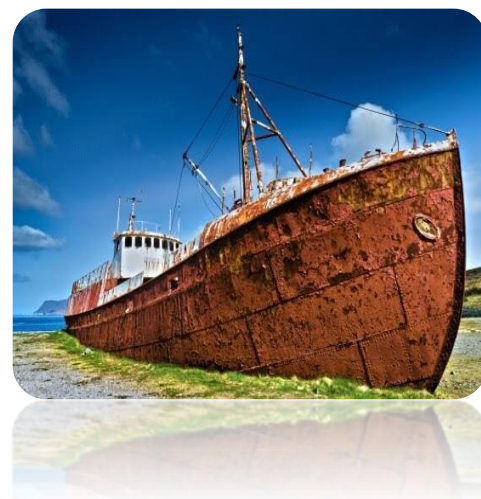
F)Ships body which are made of iron exposed to damage due to a type of change that you are studied.

1. What is the type of change that takes place?

.....

.....

2. When iron reacts with and, the body of ship loses its shining as a result of iron



G)Look at the following figure, then choose the correct answer:

a. The number which represents filtration process is

(1 - 2 - 3 - 4)

b. The number which represents evaporation process is

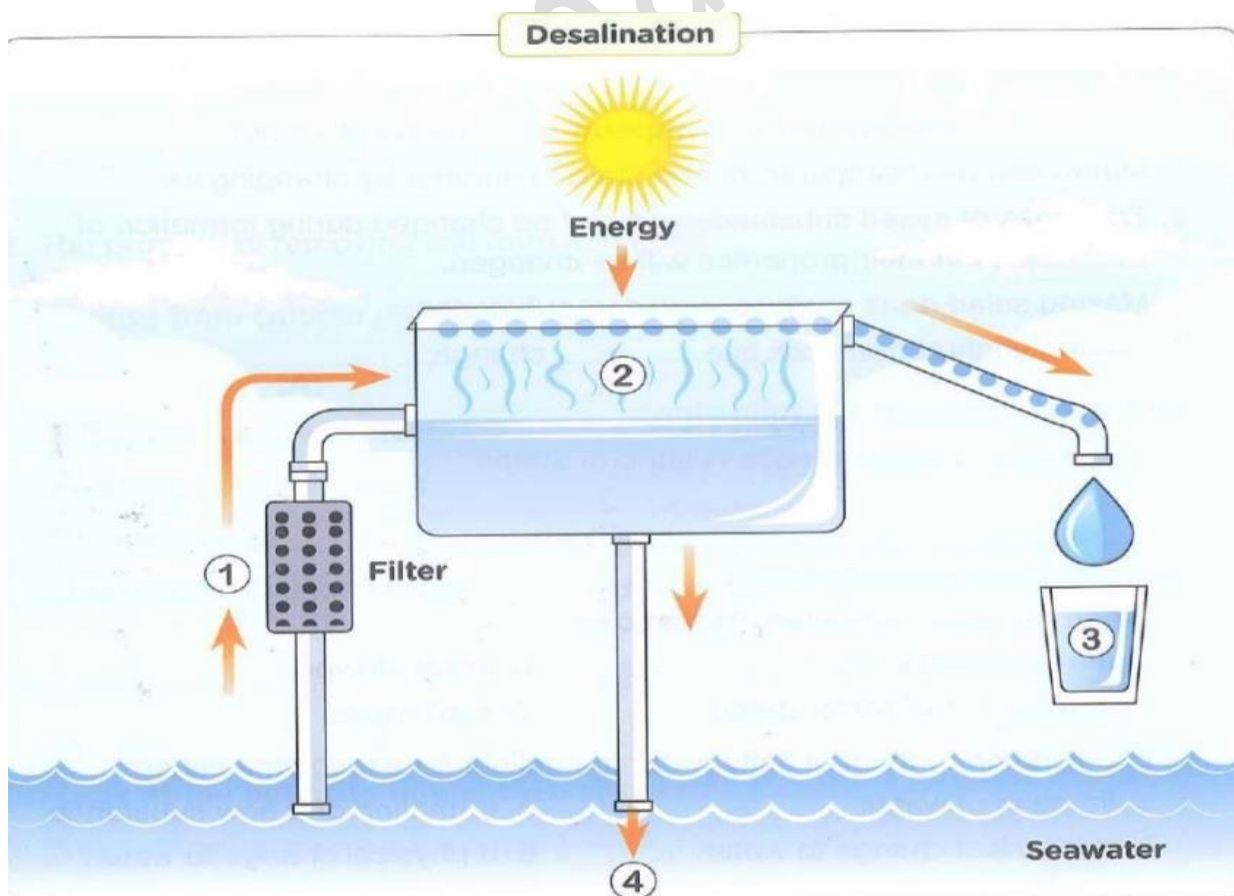
(1 - 2 - 3 - 4)

c.The number which represents the drinkable water is

(1 - 2 - 3 - 4)

d.The number which represents the water that contains very big amount of salt and minerals is

(1 - 2 - 3 - 4)



Final revision – answers

Complete the following sentences using the words below:

1. Water can change from the liquid state to **gas** state by increasing its temperature.
2. The distance between particles of water is very small in case of its **solid** state.
3. The movement of particles of matter increases in case of **melting** and **evaporation** processes.
4. By decreasing the temperature of water vapor, it releases **thermal** energy and changes into water.
5. Salty water is a mixture that consists of salt which is a **solid** state of matter and water which is a **liquid** state of matter.
6. When two substances combine and form a new substance, this new substance is called a **compound**.
7. To separate mud from salty water we can use **filtration** process.
8. To separate salt from salty water we can use **evaporation** process.
9. When we heat an ice cream, it **melts** and becomes liquid.
10. Melting process occurred by **increasing** the temperature of the matter.
11. When we keep some of ice cubes in a low temperature, they don't **melt**.
12. When ice is melted, it is changed from **solid** state to **liquid** state.

13. Iron is a solid state of matter that has definite volume and shape.
14. The state of matter which has definite volume and take the shape of container is the liquid state of matter.
15. Air is considered as an example of gas state, because it takes the volume and the shape of container.
16. The distance between particles of solid matter is very close together.
17. When an amount of a liquid is heated, the speed of its particles will increase.
18. We can separate dusts from water by using filtration process.
19. Cutting a paper into pieces is considered as a physical change, while burning it is considered as a chemical change.
20. Making salad doesn't produce new substance.
21. The reaction between some metals and oxygen gas causes loss of their shining, and this reaction is considered as a chemical change of matter.
22. Melting of wax is a physical change, while burning of wood is a chemical change.
23. The change in the structure of the original matter producing a new matter is known as chemical change.
24. Boiling of water to form water vapor is considered as a physical change.
25. Digestion of food forms a new substance which has new properties.

26. Making yoghurt from milk is a chemical change.
27. Changing the color of iodine and starch mixture is a chemical change, while changing the color of water and food color mixture is a physical change.
28. Helium isn't flammable, this property is considered as chemical property.
29. We can use helium gas to fill blimps, because it's lighter than air.
30. Helium isn't flammable or poisonous, so it's considered as a safe gas.
31. The ability of copper to be stretched, is from physical properties of copper.
32. Cooking pans can be made of copper because it's good conductor of heat, while electrical wires can be made of copper because it's good conductor of electricity.
33. Matter is anything that has mass and occupies space.
34. Matter can exist in three states that are solid , liquid and gas.
35. Matter can be described by shape , color or texture.
36. The movement of particles inside matter can describe its state.
37. The particles inside gas move very freely.
38. Light and sound are not matter , but they are considered forms of energy.
39. Water vapor, oxygen gas and carbon dioxide gas are examples of gaseous states.

40. Water has indefinite shape and definite size.
41. Some matters are very small and we cannot see them, such as germs or air.
42. water can be poured in a container and it takes the shape of the container.
43. Producers can make glucose sugar which is rich in energy through photosynthesis process.
44. Organisms that return nutrients to the soil again are decomposers.
45. The tiger that feeds on the deer is called a predator, while the deer called prey.
46. An organism that feeds on plants directly called primary consumer.
47. Decomposition process takes place on land as well as under water.
48. Organisms that feed on the remains of dead animals and can be added at the end of the chain called decomposers.
49. The hawk feeds on the snake that feeds on frogs; Therefore, the hawk is considered as tertiary consumer.
50. Ecosystem consists of living things and non-living things.
51. Decomposition process done by two types of living organisms, which are decomposers and scavengers.
52. Recycling is a process through which humans can make new products from waste materials.

53. Snails, earthworms and slugs are considered as decomposers while vultures, crabs and cockroaches are considered as scavengers.
54. Scavengers organisms that break down the remains of dead plants and animals into nutrients that return to the ecosystem.
55. of the energy in dead prey are recycled to the soil.
(10% - 90%)
56. is a natural recycling factory.
(Photosynthesis – Decomposition)
57. Corals in the marine food web are considered as
(consumers – producers)
58. is/are considered a healthy ecosystem.
(Coral – Coral reefs)
59. Rabbits die quickly when disappear from the ecosystem.
(hawks – grasses)
60. water is suitable for microorganisms.
(Cold – Warm)
61. Corals the seawater to get their food.
(absorb – filter)
62. Micro-plastics are very harmful as they are not
(toxic – nutritious)

63. A long food chain has a great number of
(producers – consumers)
64. Gentle rain may the desert ecosystems.
(benefit – harm)
65. Habitat loss may the ecosystems.
(benefit – harm)
66. water is healthy for microorganisms.
(Cold – Warm)
67. Heavy rain may the desert ecosystems.
(improve – destroy)
68. Habitat restoration may the ecosystems.
(benefit – harm)
69. of the energy in dead prey are transferred
to predators.
(10% - 90%)
70. Habitat loss for any living organism make them
.....
(go extinct – survive)
71. Decomposers recycle nutrients to
(soil – air)
72. Coral bleaching means the coral color turns to
.....
(red - white)

73. Algae in the marine food web are considered as
.....
(consumers – producers)

74. The amount of rainfall has a strong effect on the
..... ecosystem.
(marine – desert)

(freezing – increase – water - temperature – decrease –
particles – melting)

1. When a chocolate cube is exposed to sun rays, its temperature will increase and it will become liquid.
2. Matter can be changed from one state to another by changing its temperature.
3. When we put a bottle containing water in freezer its temperature will decrease and becomes solid.
4. Solid state is turned into liquid state by melting process.
5. Liquid state is turned into solid state by freezing process.
6. By changing the temperature of matter, its particles speed will change.
7. 0°C is the freezing point of water.

(the same – mixture - mass - compounds – color - properties – changed)

1. The mass of a mixed substance will not be changed during formation of compounds, but their properties will be changed.
2. The mass of salt in salty water will be the same after the mixture is formed.
3. By adding iodine to starch, their color will change into dark blue forming a new compound.
4. By mixing salt with pepper, a mixture is formed which has no change in the mass and properties of its components.
5. By adding baking soda to vinegar, the properties of the formed substance will be changed.

(salt – filtration – energy – marine – fresh - oceans – expensive – seas)

1. We can drink fresh water, so we cannot drink the water of oceans and seas.
2. We can remove seaweed, shells and fish from ocean's water by using filtration process.
3. Among the problems of desalination process is that it requires a lot of energy and it is very expensive process.

4. After desalinating water, the water that is pumped back to oceans contains very large amount of salt which can harm the marine life.

(experiments – volume – length – satellites – speed – fossils)

1. To build a house, architects must measure the length and width of walls before building walls.
2. Bakers use the measuring cup to measure the volume of oil during making cakes.
3. Marine biologists can measure the speed of sound of whales in oceans.
4. Paleontologists must measure the size and shape of fossils to identify them.
5. Measurements of scientists must be accurate during doing their experiments.
6. Cartographers use information that are received from satellites to create maps of the Earth's surface.

Write the scientific term of each of the following:

1. A gas taken from the air by leaves to help the plant to make its own food. (**Carbon dioxide gas**)
2. A liquid substance that plants, animals and human need to survive. (**Water**)
3. A part of the plant that carries water and nutrients from the roots to the leaves. (**Stem**)
4. The process by which plant can make its own food. (**Photosynthesis process**)
5. The gas which is released from plants during photosynthesis. (**Oxygen gas**)
6. It is a process of transporting seeds from one place to another. (**seed dispersal**)
7. A part of the plant that is responsible for the reproduction process. (**flower**)
8. The source of energy that the plant use to make photosynthesis. (**Sun**)
9. The process by which plants make their own food by using the energy of sunlight. (**Photosynthesis process**)
10. Parts of the plant where sunlight allows carbon dioxide to combine with water during photosynthesis process. (**Plant's leaves**)
11. Vessels in plant through which water and nutrients move up from roots to leaves. (**Xylem**)

12. Narrow holes spread on the surface of plant's leaves that allow gases to come in and out the plant.
(**Stomata**)
13. The gas that the plant needs to make photosynthesis process.
(**Carbon dioxide gas**)
14. A substance that is produced from the plant during photosynthesis process and provides it with its needed energy.
(**Sugar**)
15. Small structures in the plant's roots that increase the absorption of water and nutrients from the soil.
(**Root hairs**)
16. A part of the plant that fix it in the soil.
(**Plant's roots**)
17. A part of the plant that supports its leaves and flowers.
(**Plant's stem**)
18. The kind of plant's stem in vines.
(**Climb stems**)
19. The stems that are extended above and along the ground.
(**Runners**)
20. A plant that has a tuber stem.
(**Potato plant**)
21. It is found in plant's leaves that gives them green color and absorbs energy from the sunlight.
(**chlorophyll**)
22. Tubes in the plant that transport food materials from the leaves to other parts of the plant.
(**Phloem**)
23. A gas produced during photosynthesis and is needed for respiration of living organisms.
(**Oxygen gas**)
24. A type of sugar produced by the plant during photosynthesis process.
(**Glucose**)

25. Blood vessels carry blood from the heart to all body parts.
(**Arteries**)
26. Blood vessels carry blood from the body parts and return it back to the heart.
(**Veins**)
27. The human body system that is responsible for transportation of blood and other fluids throughout the body.
(**Circulatory system**)
28. A system of tubes through which water, nutrients and plant food are carried all over the plant.
(**Transport system**)
29. Parts of the plant that are responsible for reproduction.
(**Flowers**)
30. The process of producing new plants.
(**Plant reproduction**)
31. A community that contains living organisms and nonliving things.
(**Ecosystem**)
32. The process that takes place inside plants through which we can get oxygen.
(**Photosynthesis**)
33. It is a form of energy that changes into chemical energy during photosynthesis process.
(**Light energy**)
34. A device that is used to measure the height of a boy.
(**metric stick**)
35. A device that is used to measure the temperature of milk.
(**thermometer**)

36. It is the primary source of energy for all living organisms on the Earth. (**The sun**)
37. A type of living organisms that can produce its own food by absorbing sunlight. (**Plants**)
38. The sugar that is formed inside plants during photosynthesis process. (**Glucose**)
39. The gas that is present in air and necessary for the formation of plant food. (**Carbon dioxide gas**)
40. The gas that is produced from photosynthesis process. (**Oxygen gas**)
41. Living organisms that both humans and animals need to survive. (**Plants**)
42. A group of living organisms that can produce their own food. (**Producers**)
43. A group of living organisms that can live on decaying organisms. (**Decomposers**)
44. It is a process through which decomposers can recycle nutrients back into the soil. (**Decomposition process**)
45. It is a model that shows one linear set of feeding relationships and energy flow between living organisms. (**Food chain**)
46. The consumer that hunts and eats another animal. (**Predator**)

47. It is a process through which the nutrients found in dead organisms' bodies return back to the ecosystem.
(**Decomposition process**)
45. They are organisms that feed on dead organisms' bodies and break them down into smaller pieces.
(**Scavengers**)
46. They are organisms that break down the remains of dead plants and animals into nutrients that return to the ecosystem.
(**Decomposers**)
47. It is a process through which humans can make new products from waste materials. (**Recycling process**)
48. They are scientists who work on restoration projects to have a stable environment for plants to survive.
(**Ecologists**)
49. Organisms that use human clothes or animal bodies or even wind to disperse their seeds to new habitats.
(**Plants**)
50. The suitable ecosystem for plant-community ecologists to do their researches. (**Prairie**)
51. A way of life that coastal communities near the reefs have adopted. (**zero plastics**)
52. The animal that is eaten by another animal.
(**Prey**)
53. It is from the most diverse marine ecosystems on Earth. (**coral reefs**)

54. It is the harms that happen to air, water and soil due to human activities. (**Pollution**)
55. A human activity that leads to decreasing the number of fish and affecting many marine food webs. (**Overfishing**)
56. They are consumers that exist at the top of food chains. (**Top predators**)
57. They are consumers which feed on secondary consumers. (**Tertiary consumers**)
58. They are living organisms that include bacteria and fungi, which return energy back to the soil. (**Decomposers**)
59. It transfers between animals in a food web, to help them do their activities and survive. (**Energy**)
60. It is the number of organisms of one type of species living in an area. (**Population**)
61. Any increase or decrease in the number of organisms. (**Population change**)
62. Flying living organisms that build their nests on the top of mountain cliffs and dive deeply into the sea to eat. (**Seabirds**)
63. They are organisms that are too small for people to see with only their eyes. (**Microorganisms**)
64. It is a condition in which coral reefs turn completely into white. (**Coral bleaching**)

65. They are rays coming from the Sun that break down plastic products into microplastic. (**UV rays**)
66. Small pieces of plastics in the size of rice grains and they cause harms to marine organisms. (**Microplastics**)
67. It is a process that people can do for plastic waste materials instead of throwing them in seas and oceans. (**Recycling**)
68. They are projects in which scientists, engineers and citizens try to repair all parts of a habitat. (**Habitat restoration projects**)
69. It is an area in the sea, where scientists take care of small pieces of coral until they grow up. (**Nursery**)
70. A process of returning a habitat back to its natural state before harm was done. (**Habitat restoration**)
71. Anything that has a mass and a volume. (**Matter**)
72. A property of matter by which we can distinguish between hot and cold objects. (**Temperature**)
73. The state of water after its freezing. (**Solid**)
74. The state of matter that has definite volume and shape. (**Solid**)
75. The state of matter that is characterized by having a definite volume but it doesn't have a definite shape. (**Liquid**)

76. Substances that take the shape and the volume of their containers. (**Gases**)
77. The state of matter that has a lot of spaces between its particles. (**Gases**)
78. The tool used to measure the length of a wall. (**Measuring tape**)
79. A state of matter that has a fixed shape. (**Solid**)
80. The building units of matter. (**Particles**)
81. A device used to examine objects that are too small to be seen with the naked eye. (**Microscope**)
82. A state of matter that its particles vibrate around their place. (**Solid**)
83. A state of matter that its particles move faster than solids and have a definite volume. (**Liquid**)
84. The state of water after its heating for high temperatures. (**Gas**)
85. A device used to examine one tiny particle such as a blood cell. (**Electron microscope**)
86. A model of the whole world that is made in the shape of a large ball. (**Globe**)
87. A copy that is similar to a real thing which we cannot observe with our eyes. (**Model**)
88. A material that is used to build the roofs of cold weather homes. (**Ceramic tiles**)

89. A material that is used to build the roofs of desert homes. (**Strong stones**)
90. The property of matter which is measured by the measuring cup. (**Volume**)
91. The property of matter which is measured by the balance. (**Mass**)
92. The property of matter which is measured by the tape measure. (**Length**)
93. The properties of matter which you can observe them by using your five senses. (**Physical properties**)
94. The properties of matter which can be observed and measured by the changes that happen when the material interacts with other materials. (**Chemical properties**)
95. It is the amount of space that matter takes up. (**Volume**)
96. It is a measure of the amount of matter. (**Mass**)
97. It is a measure of how quickly the particles in a matter are moving. (**Temperature**)
98. It is a light gas which is used in filling blimps. (**Helium gas**)
99. The ability of material to transfer heat and conduct electricity. (**Conduction**)
100. A matter which is used in making gloves because it is waterproof and flexible. (**Rubber**)

101. The tool that is used by bakers to measure the volume of water during making bread.
(**Measuring cup**)
102. The scientists who measure the size and shape of fossils.
(**Paleontologists**)
103. They are responsible for measuring and mapping Earth's surface.
(**Cartographers**)
104. It is a tool which can give us information about climate and topography.
(**Map**)
105. It is a process by which a matter is changed from solid to liquid state.
(**Melting process**)
106. The state of matter in which matter has definite volume and shape.
(**Solid state**)
107. The state of matter in which matter has definite volume and takes the shape of its container.
(**Liquid state**)
108. The state of matter in which matter takes the volume and the shape of its container.
(**Gas state**)
109. They are changes in matter which are usually reversible and don't affect its structure.
(**Physical changes**)
110. It is the process by which the particles of matter gain energy and changes from solid to liquid state.
(**Melting process**)

111. It is the process by which the particles of matter lose energy and changes from liquid to solid state.
(**Freezing process**)
112. The state of water when its temperature is between 0°C and 100°C.
(**Liquid state**)
113. It is the process by which matter changes from liquid state to gas state.
(**Evaporation process**)
114. It is the process by which matter changes from gas state to liquid state.
(**condensation process**)
115. It is the substance that consists of more than one matter which don't have any physical or chemical change in their properties.
(**Mixture**)
116. A matter that is formed when two or more materials combine chemically.
(**Compound**)
117. The process of removing salt from salt water.
(**Desalination process**)
118. The process which can be used to remove any large materials from sea and ocean water.
(**Filtration process**)
119. The process which can be used to separate salt and minerals from salt water of seas and oceans.
(**Evaporation process**)

Correct the underlined words:

1. Respiration process helps the plant to make its own food.
(**Photosynthesis**)
2. Oxygen gas is absorbed by plant's leaves to make photosynthesis process.
(**Carbon dioxide**)
3. When a plant is placed in sunlight, its leaves become pale green.
(**Dark green**)
4. Humans can get their food from air and animals.
(**Plants**)
5. Plant's leaves absorb water and nutrients from the soil.
(**Roots**)
6. There are smaller vessels that connect the root to the leaves.
(**The stem**)
7. There are tiny holes on the stem to allow gases passes into the plant.
(**Leaves**)
8. Stomata allow water to move into and out of the plant.
(**Gases**)
9. Plant's leaves help it to be fixed in the soil. (**Roots**)
10. The plant can absorb more water and nutrients from the soil by the help of xylem that are found in the roots.
(**Root hairs**)
11. Tree trunks are climb stems. (**Wood**)
12. Potato plant's stems called runners that extend underground.
(**tubers**)
13. The stems that extend above and along the ground are called tubers.
(**Runners**)

14. Most flowers have wood stems. (Upright)
15. Animals and people can't live without carbon dioxide gas to breathe. (Oxygen)
16. The leaves of pine trees are flat and wide. (Narrow)
17. Chlorophyll in plant's roots absorbs energy from the sunlight. (Leaves)
18. Xylem tubes inside the leaves transport food materials downward from the leaves to other parts of the plant. (Phloem)
19. Flowers of plants produce root hairs that help the plant to reproduce. (Seeds)
20. Blood rich with oxygen gas is carried by veins from the heart to the body parts. (Arteries)
21. Human circulatory system consists of the lungs and blood vessels. (Heart)
22. Each of xylem in plants and veins in human are two-ways vessels. (One-way)
23. Phloem tubes carry water and nutrient from the roots to the leaves. (Xylem)
24. Veins carry blood rich in oxygen and nutrients. (Arteries)
25. During photosynthesis process, light energy is transformed into sound energy. (Chemical)

26. Plants make glucose during respiration process that provides them with energy. (**Photosynthesis**)
27. Coconut seeds disperse by wind. (**Water**)
28. Burdock seeds are light seeds. (**spiny**)
29. Tomato and coconut seeds being eaten by animals and come out with their stool. (**Apple**)
30. Chlorophyll in plant's roots absorbs energy from the sunlight. (**Leaves**)
31. Due to rising of water temperature, coral reefs turn completely into green. (**White**)
32. Producers need the energy of moonlight to make photosynthesis process. (**Sunlight**)

Put (✓) or (X):

1. Balance can be used to measure the length of your friend. (**X**)
2. Strong stones protect the roofs of desert homes from dust and dirt. (**✓**)
3. We may need to measure more than one property to identify an unknown matter. (**✓**)
4. The attraction of different materials to the magnet is from chemical properties of matter. (**X**)
5. The length of wood bar can be measured by a ruler. (**✓**)
6. Ceramic tiles protect desert home roofs from dust and dirt. (**X**)
7. Air is a matter so it has mass. (**✓**)

8. The ability to rust is one of the physical properties of matter. (X)
9. Cartographers can measure the mass of the Earth planet. (X)
10. Heavy rain improves the desert ecosystem more than gentle rain. (X)
11. Energy remains in an ecosystem but it's transferred between its components. (✓)
12. Living organisms always need non-living things in the ecosystem to survive. (✓)
13. Coral reefs lose their colors when the water temperature decreases. (X)
14. A primary consumer could be a predator in its food chain. (X)
15. Humans are both primary and secondary consumers. (✓)
16. The restoration process always takes a little time. (X)
17. When a plant dies, consumers may not be found in this short food chain. (✓)
18. Overfishing is one of the most natural events that impact the marine ecosystem. (X)
19. Algae enter the tissue of corals when the water temperature increases. (X)
20. If the grass is removed from the desert, hawks will die quickly. (X)
21. It is better to use single-used plastic forks to reduce plastic pollution. (X)

22. Palau work with fishers to make sure they are not overfishing in coral reefs. (✓)
23. Heavy rain in the desert causes the growth of more producers. (✗)
24. The number of prey increases when the number of predators decreases. (✓)
25. Increasing the number of primary consumers may make producers disappear. (✓)
26. Secondary consumers may migrate if the producers are removed from the ecosystem. (✓)
27. Microorganisms recycle back the important elements to water. (✗)
28. When the water becomes warm, seabirds have to move for another cooler area. (✓)
29. Habitat loss may cause extinction for any species of living organisms. (✓)
30. Using plastic grocery bags is better than using cloth bags. (✗)
31. Sea turtles and corals are always in danger due to plastic pollution. (✓)
32. The state of matter can't be changed from one form to another. (✗)
33. Matter exists everywhere around us in nature. (✓)
34. The particles in ice move more freely than in water. (✗)

35. Water always takes the shape of the container that it is poured in. (✓)
36. Matter consists of tiny moving particles. (✓)
37. Water vapor has no texture and it is a visible matter. (✗)
38. Gases completely fill a closed container, such as when you blow a balloon. (✓)
39. Ice melts into water by cooling it. (✗)
40. Water has indefinite shape and size. (✗)
41. Two objects can take up the same space at the same time. (✗)
42. If producers were removed from an ecosystem, the consumers will need to move away. (✓)
43. Overfishing is one of the climate changes that affects the marine ecosystem. (✗)
44. What is happening on land doesn't affect what is happening in marine ecosystem. (✗)
45. It is better to recycle the waste materials than throwing them in rivers and seas. (✓)
46. Food webs don't change if their surrounding environments get changed. (✗)
47. If we introduce a new predator to an ecosystem, this ecosystem will be affected. (✓)
48. If there is a heavy rain in a desert ecosystem, it will be harmed. (✓)
49. Zooplankton can make their own food by photosynthesis process. (✗)

50. In a marine food web, there are many top predators like sea star and sea urchin. (X)
51. Top predators are decomposers that present at the top of food chains. (X)
52. Ecosystem can be affected by climate changes, pollution and human activities. (✓)
53. Most of living organisms are prey for some animals and also predators for others at the same time. (✓)
54. The Sun produces energy that decomposers use to make their food. (X)
55. The soil fertility depends on decomposers. (✓)
56. Any food chain can be formed of producers only. (X)
57. A desert food chain doesn't contain any type of fish or sharks. (✓)
58. Energy transfers when a prey loses energy to the predator which feeds on it. (✓)
59. Forest fire negatively affects the marine organisms. (X)
60. Pollution affects both of food resources and animal habitats. (✓)
61. Forest fire produces smoke only that covers the grasses. (X)
62. Death of an animal due to pollution affects all other levels of the food web. (✓)
63. If the climate change is unsuitable, the population of a species decreases. (✓)
64. In an ecosystem, all species depend on other species for survival. (✓)

65. Seabirds eat small fish that swim near the water surface.
(✓)
66. Microorganisms are producers that small fish feed on to get energy.
(✓)
67. Healthy habitats provide living organisms with clean air, healthy food and water.
(✓)
68. The flow of energy in food webs is not affected when the natural habitats are destroyed.
(✗)
69. Human activities impact the nonliving things in an ecosystem.
(✗)
70. Healthy coral reefs have no benefit to fish but they are important for tourism.
(✗)
71. When the temperature of seawater decreases, coral reefs receive more algae.
(✓)
72. Coral bleaching occurs as a result of throwing plastic in seawater.
(✗)
73. Living organisms in seas and oceans cannot differentiate between real food and plastic waste materials.
(✓)
74. Jellyfish can get its energy by eating the sea turtle.
(✗)
75. UV rays coming from the Sun, break down plastic wastes into microplastics.
(✓)
76. Coral reefs filter the seawater to get their needed food.
(✓)
77. The polluted water has a positive effect on coral reefs.
(✗)

78. If coral reefs are destroyed, many marine food chains will be destroyed. (✓)
79. Primary consumers and predators in seas and oceans are negatively affected by rising water temperature. (✓)
80. Coral reefs depend on butterflyfish for food and shelter. (✗)
81. Coral reefs are considered as a suitable habitat for sharks. (✗)
82. Removing plants negatively affects consumers in an ecosystem. (✓)
83. Restoration projects are used to find out solutions for increasing pollution. (✗)
84. It is better to keep natural resources healthy than applying restoration projects. (✓)
85. Citizens must share in returning a habitat back to its healthy condition before harm was done. (✓)
86. Nursery is the natural habitat in the sea, in which coral reefs continue growing and reproducing. (✗)
87. People near the coastal areas must replace plastic bags with cloth one. (✓)

Choose the correct answer :

1. From the physical properties which can't be measured by using a special tools is
a) volume c. mass
b) color d. length
2. Which of the following homes have a flat roofs ?
a) Desert homes only.
b) Cold weather homes only.
c) Desert homes and tropical rainforest homes.
d) Desert homes and cold weather homes.
3. When the particles of a matter move with high speed, its increases.
a) Mass. c. Volume
b) Length. d. Temperature
4. The used materials in making cooking pans are
a) copper and glass. c. copper and helium
b) glass and helium. d. copper and wood
5. Both are sinking in water and attracted to the magnet.
a) Stone and iron nail
b) Paper clip and iron nail
c) Paper clip and wood spoon
d) Plastic ruler and wood spoon
6. 1 kilogram of iron = 1 kilogram of cotton. This sentence means that both materials are equal in
a) mass only.
b) volume only.
c) mass and temperature.

d) volume and mass.

7. Mass is a measurement of the

- a) Odor of flower.
- b) Length of wood bar.
- c) amount of flour
- d) color of apple

8. We can define volume as the amount of that matter takes up.

- a) space
- b) time
- c) temperature
- d) water

9. From the people which use balances in their works are

- a) cartographers.
- b) bakers
- c) paleontologists
- d) space scientists

10. are both primary and secondary consumers.

- a) Plants
- b) Humans
- c) Fungi
- d) Predators

11. In any food chain, the primary consumers may be

- a) predators only
- b) prey only
- c) predators or prey
- d) green plants

12. Decomposers can get their energy from

- a) living things
- b) soil and water
- c) dead organisms
- d) the sun

13. The relationship between is "predator and prey" relationship.

- a) Algae and corals.
- b) Frogs and locusts
- c) rabbits and carrots
- d) eagles and fungi

14. The tertiary consumer does not exist in food chain
(.....)

- a) Algae → coral → parrotfish → shark
- b) Grass → mouse → snake → eagle
- c) Grass → locust → frog → snake
- d) Carrot → rabbit → fox → bacteria

15. In this food chain (Grass → rabbit → hawk), if the rabbits disappear, will increase.

- a) Grass
- b) a and b
- c) hawks
- d) no correct answer

16. In this food chain (Acacia tree → giraffe → Lion).
The symbol (→) represents the flow of

- a) pollution
- b) force
- c) energy
- d) motion

17. Primary consumers are the link in their food chain.

- a) first
- b) second
- c) third
- d) final

18. Healthy desert ecosystems always require from time to time.

- a) strong winds
- b) heavy rain
- c) gentle rain
- d) floods

19. Which of the following examples causes the greatest damage to an ecosystem?

- a) Grass removal
- b) Predators extinction
- c) predators increase
- d) prey increase

20. Heavy rain may the desert ecosystem.
a) improve c) harm
b) benefit d) restore
21. If the grass is removed from an ecosystem,
will die first.
a) primary producers
b) primary consumers
c) secondary consumers
d) decomposers
22. When a predator feeds on prey, is transferred
between them.
a) water c) motion
b) blood d) energy
23. When the number of predators increases, the number of
..... decreases.
a) producers c) decomposers
b) other predators d) prey
24. Human activities and pollution in impact the
marine ecosystem quickly.
a) Cities c) Deserts
b) Forests d) islands
25. All the following examples represent bad human
activities, except
a) Overfishing c) floods
b) air pollution d) plastic pollution

26. Nutrients are recycled back into the ecosystem by the

- a) predators.
- b) prey.

- c) consumers
- d) decomposers

27. In most marine food webs, are considered producers.

- a) grass.
- b) algae

- c) bacteria
- d) small fish

28. All the following have bad impact on the marine ecosystem, except

- a) island pollution
- b) heavy rain

- c) plastic pollution
- d) overfishing

29. If the number of primary consumers increases so much, will disappear.

- a) Producers
- b) Decomposers

- c) secondary consumers
- d) tertiary consumers

30. All the following organisms can make their own food, except

- a) grass
- b) worms

- c) algae
- d) microorganisms

31. If the climate change was suitable, the living organisms will

- a) die
- b) migrate

- c) survive
- d) extinct

32. live on the tops of mountain cliffs and depend on fish as their main source of food.

- a) Eagles
- b) Hawks
- c) owls
- d) seabirds

33. are/is considered the producers in the marine food web.

- a) Small fish
- b) Coral reefs
- c) Marine microorganisms
- d) Grass

34. The migration of microorganisms to a new habitat is due to the increase of

- a) the air temperature
- b) The water temperature
- c) the number of seabirds
- d) the number of fish

35. Increasing water temperature may cause all the following, except

- a) increasing microorganisms
- b) coral bleaching
- c) migration of fish
- d) death of some seabirds

36. If the turtle sees a plastic piece, the turtle will

- a) avoid it
- b) escape quickly
- c) begin to eat it
- d) digest it

37. is one of the best ways to protect the marine ecosystem.

- a) Throwing sewages in seas
- b) Using plastics for single use
- c) Breaking plastics
- d) Recycling plastics

38. Micro-plastics are formed by the effect of the

- a) air
- c) water

b) sun

d) soil

39. is an area in the ocean where the small pieces of corals are nurtured.

a) Coral reefs

c) Protectorate

b) The nursery

d) Garden

40. is one of the ways done by coastal communities to reduce plastic pollution.

a) Replacing wooden forks with plastic ones

b) Using grocery plastic bags

c) Using single-used plastics

d) Using cloth bags

41. All the following are affected by pollution, except

.....

a) living organisms as human, plants and animals

b) non-living things as air, water and soil

c) all components of the ecosystem

d) dead organisms only

42. If the number of, the grass will increase in the ecosystem.

a) Decomposers decreases

b) producers increases

c) Primary consumers increases

d) primary consumers decreases

43. are the top predators in their food chain.

a) Frogs

c) Alligators

b) Birds

d) Butterflies

44. Decomposers directly benefit from and complete the food chain cycle.
- a) water and fish
 - b) air and birds.
 - c) dead organisms
 - d) soil and dead producers
45. All the following organisms depend on another organism to get their energy, except
- a) predators
 - b) prey
 - c) green plants
 - d) b and c
46. A population change refers to the increase or decrease in
- a) water and food resources
 - b) the weather temperature
 - c) number of living organisms
 - d) the water temperature
47. Which matter has a definite shape?
- a) Water
 - b) ice
 - c) oil
 - d) air
48. can be poured in any container.
- a) Oxygen
 - b) juice
 - c) ice
 - d) air
49. Anything that has mass and occupies space is called
- a) energy
 - b) force
 - c) matter
 - d) weight
50. Any matter exists in state(s).
- a) One
 - b) two
 - c) three
 - d) four

51. All the following examples represent solid states, except

.....

- a) Juice b) feather c) ice d) rock

52. All matter around us consist of

- a) Cells b) particles c) nutrients d) proteins

53. Matter can be described by

- a) Hardness b) color c) shape d) all the previous

54. Which of the following examples isn't a matter?

- a) Bird's feathers c) Empty cup
b) Cup of water d) Bird sound

55. is considered an invisible matter.

- a) Milk b) air c) father d) sound

56. Cold milk and hot tea are similar in

- a) Color b) temperature c) taste d) state

57. are different matters but they exist in the same state.

- a) Water and ice c) Milk and juice
b) Wood and air d) Air and water

58. are same matters, but they exist in the different states.

- a) Wood and brick c) Oil and tea
b) Oxygen and air d) Ice and water vapor

59. Tiny particles inside move very freely.

- a) Water b) air c) wood d) ice

60. You can measure your height using a
- a) Balance
 - b) Thermometer
 - c) ruler
 - d) metric stick
62. Thermometer can be used to know the of water.
- a) Shape
 - b) color
 - c) temperature
 - d) weight
63. Water is described by all of these properties, except
- a) We can pour it
 - b) it occupies space
 - c) It has a definite shape
 - d) It takes the shape of the container
64. Which of the following matters has no texture?
- a) Feather
 - b) oxygen
 - c) water
 - d) ball
65. has a definite size and an indefinite shape.
- a) Air
 - b) ice
 - c) water
 - d) wood
66. Some matters are very small and we cannot see them, such as
- a) Water
 - b) germs
 - c) pencils
 - d) insects
67. The model that shows the interactions of food chains in an ecosystem is called
- a) environmental system.
 - b) food web
 - c) photosynthesis process
 - d) plant transport device

68. An animal that feeds on another animal in the food chain is known as

- a) prey
- b) predator
- c) decomposer
- d) producer

69. Which of the following organisms helps to restore the fertility of agricultural soils again?

- a) Autotrophic
- b) Decomposer
- c) Carnivores
- d) Producer

70. is considered a food producing organism.

- a) Fish
- b) Human
- c) Mouse
- d) Grass

71. Which of the following correctly expresses the energy transfer in the food chain?

- a) sun - rabbit – fox – grass
- b) fox – grass – rabbit – sun
- c) sun – grass – rabbit - fox
- d) grass – rabbit – fox – sun

72. The deer feed on the grass and the lion feed on the deer, this is an example of

- a) food chain
- b) photosynthesis
- c) food web
- d) reproduction

73. Which of the following gets its energy from another living organisms?

- a) Fox
- b) Cactus الصبار
- c) flower
- d) Eucalyptus tree شجرة الكافور

74. gets the energy of sunlight to form its own food.

- a) Consumer
b) Decomposers
c) producer
d) non-living elements

75. need energy to survive.

c) Producers, consumers and decomposers

d) Consumers and decomposers only

a) Human and fish
b) fox and rabbit

d) locust and lion

- a) Moon
- b) Stars

d) planets

1- Roots have important role in the photosynthesis process.

2- Photosynthesis process is important for plants to survive.

3- Some plants don't need soil as a basic need.

- 4- The presence of stomata on the surface of plant's leaves.
- **To allow gases to move into and out of the plant.**
- 5- Green plants can make their own food.
- **Because green plants can make photosynthesis process.**
- 6- Xylem vessels are important for the plant.
- **Because they transport water and nutrient from roots to leaves.**
- 7- There is no life on Earth in the absence of plants.
- **Because plants produce oxygen gas during photosynthesis process which is important for all living organisms to survive.**
- 8- Chlorophyll in plant's leaves has an important role in the photosynthesis process.
- **Because it absorbs the sunlight and give the leaf its green color.**
- 9- The presence of hair like structure in plant's roots.
- **To increase the amount of the absorbed water.**
- 10- Flowers are important parts for the plant.
- **Because they produce seeds for the plant reproduction.**
- 11- Circulatory system has an important role for human to survive.

- **Because it transports blood and other fluids through the body.**
- 12- Xylem in plant is a one-way vessel.
- **Because it carries water and nutrients from roots to leaves in one direction.**
- 13- Seeds dispersal may take place by animal in two different ways.
- **Because seeds can stick to animal fur or being eaten by animals and come out with their stool.**
- 14- Seeds of maple or dandelion plants can disperse through wind easily.
- **Because they are light seeds.**
- 15- Burdock seed can stick to animal fur.
- **Because they have spines.**
- 16- Human needs to eat some animal and plants.
- **To get energy from food to do his activities.**
- 17- Sunlight is important for all living organisms.
- **Because it is absorbed by plants to make their own food then animals and humans eat these plants.**
- 18- Consumers depend on producers to get their energy.
- **Because they cannot make their own food.**
- 19- Soil fertility depends on decomposers.

- **Because they return the nutrients of dead organisms back to the soil.**
- 20- Scavengers must work on dead bodies before decomposers.
- **Because scavengers break down the dead bodies into smaller pieces.**
- 21- When the number of one species of consumers in an ecosystem increase, they will die.
- **Because they will not find food to eat or shelter to live.**
- 22- Death of algae may lead to moving sharks away to another places.
- **Because sharks feed on fish that depend on algae to get their food.**
- 23- Food webs can be destroyed due to pollution.
- **Because pollution negatively affects all living organisms in food web.**
- 24- In case of fire forests, animals suffer from difficulty breathing.
- **Because fire forests produce smoke that causes difficulty in breathing.**
- 25- Coral reefs are important for human communities.
- **Because humans feed on fish that depends on algae in coral reefs for food.**
- 26- Coral bleaching happens when the water temperatures rise.

- **Because when the water temperature rises, the coral reefs get rid of algae from their tissues.**
- 27- Both of rising water temperature and ingesting microplastics are harmful for coral reefs.
- **Because rising temperatures cause coral bleaching while microplastics are toxic and sharp.**
- 28- It is better to keep natural resources healthy than applying restoration projects.
- **Because restoration projects take a lot of money and a long time.**
- 29- When we remove plants from riverbanks, the floods become more dangerous.
- **Because of eroding of riverbanks.**
- 30- Rubber differs from iron.
- **Because rubber is a soft matter while iron is a hard matter.**
- 31- Salt is a matter.
- **Because it has mass and volume.**
- 32- Sugar is a solid matter.
- **Because it has a definite shape and volume.**
- 33- Wood has definite shape and volume.
- **Because it is a solid matter.**
- 34- Oxygen has no definite shape or volume.
- **Because it is a gas matter.**

- 35- Particles of a piece of iron are very close to each other.
- **Because it is a solid matter.**
- 36- Air has no definite shape or volume.
- **Because it is a gas matter.**
- 37- Particles of gases can spread out quickly to fill up any container they put in.
- **Because they are not held together.**
- 38- Using models to study some scientific concepts.
- **To study them in an easier way.**
- 39- Sometimes we need to use an electron microscope.
- **To see the components of the particles.**
- 40- Both liquids and gases don't have a definite shape and take the shape of their containers.
- **Because their particles are randomly arranged.**
- 41- Oil used in cooking is considered as an example of liquid matter.
- **Because it has a definite volume, but its shape is not definite.**
- 42- The roof of desert home is made of strong stones.
- **To protect the desert home from dust and dirt.**
- 43- The roof of tropical rainforest home is made of leaves and sticks.

- **To protect the tropical rainforest home from animals getting inside.**

44- Rusting of iron is considered from chemical properties of matter.

- **Because it is a change that happens to iron when it interacts with air and water.**

45- when the particles of a matter move quickly, its temperature increases.

- **Because quickly moving particles produce more heat energy which increase the temperature.**

46- Helium is used to fill balloons and blimps.

- **Because helium is lighter than air.**

47-Human can use helium gas safely.

- **Because it is not flammable or poisonous.**

48-wood and plastic are used in making handles of cooking pans.

- **Because they are bad conductors of heat.**

49-Architects and builders use tape measure in their work.

- **To measure the correct lengths and widths of boards before building walls.**

50- Bakers use balances and measuring cups in their work.

- **To measure the volume and mass of ingredients before start baking.**

51-Cartographers create city maps.

- **To help tourists find their way.**

52- Ice is turned into water when it is placed in a warm room.

- **Because the temperature of ice increases so it melts and becomes liquid.**

53- When the temperature of ice cubes increases, they will melt.

- **Because it will gain energy and changes into liquid water.**

54- Both melting and freezing processes are considered as physical changes.

- **Because the matter changes without any change in its structure.**

55- Formation of water drops when water vapor touches a cold surface.

- **Because the thermal energy of water vapor transfers to cold surface so the particles of water move slower and get close to each other causing water drops.**

56- Fruit salad and salty water are considered as mixtures.

- **Because they are formed of two or more materials.**

57- Filtration process is used to separate soil from water.

- **Because the particles of water are smaller than that of soil.**

58- By adding baking soda to vinegar, the properties of each of them are changed.

- **Because this mix produces gas that causes bubbles which means that a compound is formed.**

59- The components of mixture don't produce a new substance when combining together.

- **Because the components of mixture are physically combined together which means they don't react together.**

60- Air is considered as a mixture.

- **Because it consists of some gases.**

62- Making fruit salad is considered as a physical change.

- **Because it does not form a new substance.**

63- Making bread is considered as a chemical change.

- **Because a new substance is formed as the taste of bread is different from the taste of its ingredients.**

64- Formation of a layer with reddish color on the surface of a wet iron wire after a period of time.

- **Because the iron reacts with oxygen and water and rusts.**

65- Formation of a bad odor when milk is left out of the fridge for of a bad odor when milk is left several days.

- **Because of the chemical change that happens to the milk causing a strong bad odor.**

66- We cannot drink the water of oceans and seas.

- **Because it is a mixture of water, salt, minerals, gases, living organisms and dead organisms.**

What happens if:

- 1- Plants have no stem.
 - **Water and nutrients will not be carried from roots to leaves.**
- 2- Plants can't get carbon dioxide gas from air.
 - **Plants cannot make photosynthesis process so cannot make their own food.**
- 3- We put a green plant in a dark room for many days.
 - **Plants cannot absorb sunlight and the leaves will be yellow.**
- 4- We put a seed of bean in a soil.
 - **It will germinate and grow.**
- 5- we put a bean seed in a wet paper towel for more than two months.
 - **At the beginning it will germinate and grow but later it will die.**
- 6- Stomata of a plant get closed for a long time.
 - **Gases cannot move into or out the plant leaves so plants will die.**
- 7- Plant's leaves don't contain chlorophyll.
 - **Plants cannot absorb the sun light that gives the leaves their green color.**
- 8- The plant doesn't have roots.
 - **The plant cannot absorb water and nutrients from the soil.**

9- The plant stop making photosynthesis process for several days.

- **It cannot make its own food and it will die.**

10- Xylem is removed from the plant structure.

- **Water rich in nutrients can't reach the plant leaf.**

11- Human body contains arteries only without veins.

- **The human body can't get rid of carbon dioxide gas, so humans will die.**

12- Plants can't produce glucose sugar during the photosynthesis process.

- **Plants cannot get energy to grow and survive.**

13- Humans don't have circulatory system.

- **Human cannot transport blood and other fluids throughout the body.**

14- We remove the flowers of a plant.

- **Plants cannot produce seeds for reproduction / Plants cannot reproduce.**

15- There is no sunlight reaches the Earth's surface.

- **The plants cannot make their own food through the photosynthesis process.**

16- A hawk is placed in an ecosystem that doesn't contain any living organisms except plants.

- **It will move to another ecosystem, or it will die.**

- 17- All primary consumers disappear from a certain food chain.
- **The secondary consumers will move to another ecosystem, or they will die consumers will move to another.**
- 18- All types of decomposers are absent from an ecosystem.
- **Dead animals will not be decomposed, and their nutrients will not return to the soil.**
- 19- Throwing big amounts of plastic garbage and waste materials in water.
- **The water will be polluted, and the marine organisms will be negatively affected.**
- 20- A small lake is exposed to extreme hot climate for several months.
- **The water of the lake gets dry due to water evaporation.**
- 21- The number of secondary consumers in an ecosystem decrease.
- **The number of primary consumers increases, and the number of producers decreases.**
- 22- There is a gentle rain in the desert.
- **The desert ecosystem will be improved because rainwater grows plants that the organisms feed on.**

- 23- There is a heavy rain in the desert.
- **The desert ecosystem will be harmed because the heavy rain will cause flood which destroys the ecosystem.**
- 24- There is a drought in the desert and grass dies.
- **The food web in the ecosystem may be destroyed because the plants will die and also the organisms will die.**
- 25- There are many top predators in the food web.
- **The other organisms in the food web will be harmed because the top predators will eat all the organisms.**
- 26- The climate change is unsuitable for a population of one type of species.
- **The population of this species will decrease.**
- 27- The sea water becomes warm.
- **The microorganisms will move away to a cooler water and also the fish that feed on microorganisms.**
- 28- A habitat is not restored.
- **Many species in this habitat will be lost because they don't have their needs to survive.**
29. The number of primary consumers more than the amount of producers.
- **The amount of producers will be finished quickly, and most of primary consumers move away for another ecosystem to search for food.**

30. The food resources of the seabirds when the seawater becomes cooler.
- **The number of microorganisms on which small fish feed on will increase.**
31. The coral reefs when the seawater temperature rises.
- **They will get rid of algae that live in their tissue, then turn completely into white and die.**
32. Algae when coral bleaching occurs.
- **It will move away searching for other healthy coral reefs.**
33. An animal species if the community don't apply habitat restoration projects.
- **The number of these animal species decreases gradually and may extinct.**
34. Water is heated in the kettle for few minutes (according to the state of water after heating).
- **It becomes a gas.**
35. The shape of water if we put three equal amounts of water in three different containers.
- **It will change according to the shape of each container.**
36. The volume of a coin if we transfer it from a cup to another cup.
- **It will not change.**

37. Water changes into ice.
- **It will have a definite shape.**
38. A liquid change into gas.
- **It will increase.**
39. We try to examine the particles of any substance with our naked eyes.
- **Particles cannot be seen.**
40. The speed of particles of an ice cube when it is exposed to the sun.
- **It will increase.**
41. The size of a balloon when you blow it up.
- **It will increase.**
42. The arrangement of particles of water after freezing.
- **It will be organized.**
43. The state of milk if we put small amount of it in the freezer for few hours.
- **It becomes solid.**
44. The roof of cold weather homes is flat.
- **The rain will be collected on the top of the homes.**
45. A piece of paper interacts with fire.
- **It will become ash.**

46. The speed of particles of a matter decreases according to its temperature.
- **The temperature will decrease.**
47. A magnet is put close to an iron nail and a plastic spoon.
- **It will attract the iron nail only.**
48. A piece of cork is put in water.
- **It will float on the surface of water.**
49. A blimp is filled with helium gas helium gas.
- **It will rise up in the air.**
50. Electrical wire is made from plastic instead of copper.
- **It will not conduct electricity.**
51. We cool some tomatoes (according to their mass).
- **The mass of the tomatoes will not change.**
52. We increase the temperature of some ice cubes.
- **They will melt and become liquid.**
53. We heat an amount of water.
- **The water particles will move faster as it becomes vapor.**
54. The particles of water when its temperature is decreased below 0°C.
- **Particles will release energy and move slower.**

55. A piece of chocolate if it is exposed to sun ray for a period of time.
- **It will melt.**
56. The particles of water when we increase its temperature above 100°C.
- **They will move faster and change to vapor.**
57. Salty water when heating it for a long time.
- **The water will evaporate leaving the salt in the container.**
58. The mass and properties of sugar when adding it to an amount of flour.
- **The mass and the properties of sugar don't change.**
59. You expose a shiny piece of metal to air (oxygen) for a long period of time.
- **It will lose it's shining.**
60. We mix iodine with cornstarch.
- **A new substance is formed, and its color is dark blue.**
61. Oxygen, carbon, and hydrogen are combining together.
- **They release heat that can start a fire.**

Choose from column (B) what suits it in column (A):

Column (A)	Column (B)
1. Iron nail c	a.sinks in water and doesn't attract to the magnet.
2. Piece of stone a	b.floats on water and attracted to the magnet.
3. Piece of wood d	c.sinks in water and attracted to the magnet.
	d.floats on water and doesn't attract to the magnet.

Column (A)	Column (B)
2) Gentle rains c	a.Harm the desert ecosystem.
3) Heavy rains a	b.Reduces ocean pollution.
4) Overfishing d	c.Improve the desert ecosystem.
5) Recycling plastics b	d.Destroy the marine ecosystem.

Column (A)	Column (B)
1) Photosynthesis d	a.Causes death or extinction of living organisms
2) Decomposition f	b.Is a way that is used to reduce plastic pollution.
3) Restoration e	c.Means that the coral color turns to white.
4) Zero plastics b	d.Releases oxygen in the air.

5) Habitat loss	a	e.Is recovering a shelter to animals.
6) Coral bleaching	c	f.Recycles nutrients to the soil.

Column (A)	Column (B)
1) Matter d	a.Is not a matter.
2) Particles c	b.Is an invisible form of matter.
3) Sound a	c.Exist inside the matter in a continuous motion.
4) Oxygen b	d.Exists in three states.

Column (A)	Column (B)
1) solid state b	a. Has indefinite shape and definite size.
2) liquid state a	b. Has definite shape and size.
3) gaseous state c	c. Has indefinite shape and size.

Column (A)	Column (B)
1) thermometer b	a. Is used to measure the height of a boy.
2) balance c	b. Is used to measure the temperature of hot tea.
3) measuring tape a	c. Is used to measure the mass of fruits.

Column (A)	Column (B)
1- Plant d	a) are responsible for making the food of the plant.
2- Animals c	b) absorb nutrients and water from the soil.
3- Roots b	c) must move to get their food.
4- Leaves a	d) can make their food by themselves.
5- Veins g	e) Transmission of nutrients and water to the plant's leaves.
6- Phloem i	f) Allowing the needed air to enter through it.
7- Arteries k	g) Transmission of blood that carries carbon dioxide to the heart.
8- Xylem e	h) Fixing the plant in the soil.
9- Flower l	i) Transmission of food from a plant's leaf to other plant parts.
10- Plant's stem j	j) Supporting the plant and connecting the roots to the leaves.
11- Plant's root h	k) Transmission of blood rich in oxygen gas and nutrients to all cells.
12- Plant's leaf f	l) Responsible for reproduction in plants.

Compare between the following:

	solid	liquid	gas
size	Definite	Definite	Indefinite
shape	Definite	Indefinite	Indefinite
texture	Smooth	Moist	No texture
Motion of particles	Move only a little bit	Move more freely	Move very freely
Space between particles	The particles are packed tightly with each other	The particles have more space	The particles have a lot of space

Look at the following picture, then complete the following sentences:

A)



Home (1)



Home (2)



Home (3)

1. Ceramic tiles are used in making the roof of home **2** to protect it from **rains**.
2. Strong stones are used in making the roof of home **1** to protect it from **dust** and **dirt**.
3. Leaves and sticks are used in making the roof of home **3** to protect it from **animals getting inside**.

B)



Tool (A)



Tool (B)

- a. Tool (A) is used to measure the **mass** of different matter.
- b. Tool (B) is used to measure the **volume** of different matter.
- c. The measuring units that are used to describe the measurement of tool (A) are **gram** and **kilogram**.

- d. The measuring units that are used to describe the measurement of tool (B) are **milliliters**, **liters** and **cubic centimeters**.

c)



Tool (A)



Tool (B)



Tool (C)

1. Tool B is made of steel, because it is **hard** and **strong**.
2. Tool C is made of rubber, because it is **waterproof** and **flexible**.
3. Tool A is made of glass, because it is **transparent** and **smooth**.

Look at the following pictures, then choose the correct answer:



A paper clip
material (A)



A wood cube
material (B)

1. If we put the two previous materials in water, which material sinks?
(**material (A)** - material (B))

2. If a magnet is put close to the two materials, which material doesn't attract to the magnet?

(material (A) - **material (B)**)

3. We can measure the mass of each material by using a

(ruler – **balance**)

Look at the following figures, then complete the following sentences using the words below:

(meter – mass - kilogram – architects – length – bakers)



Figure (1)

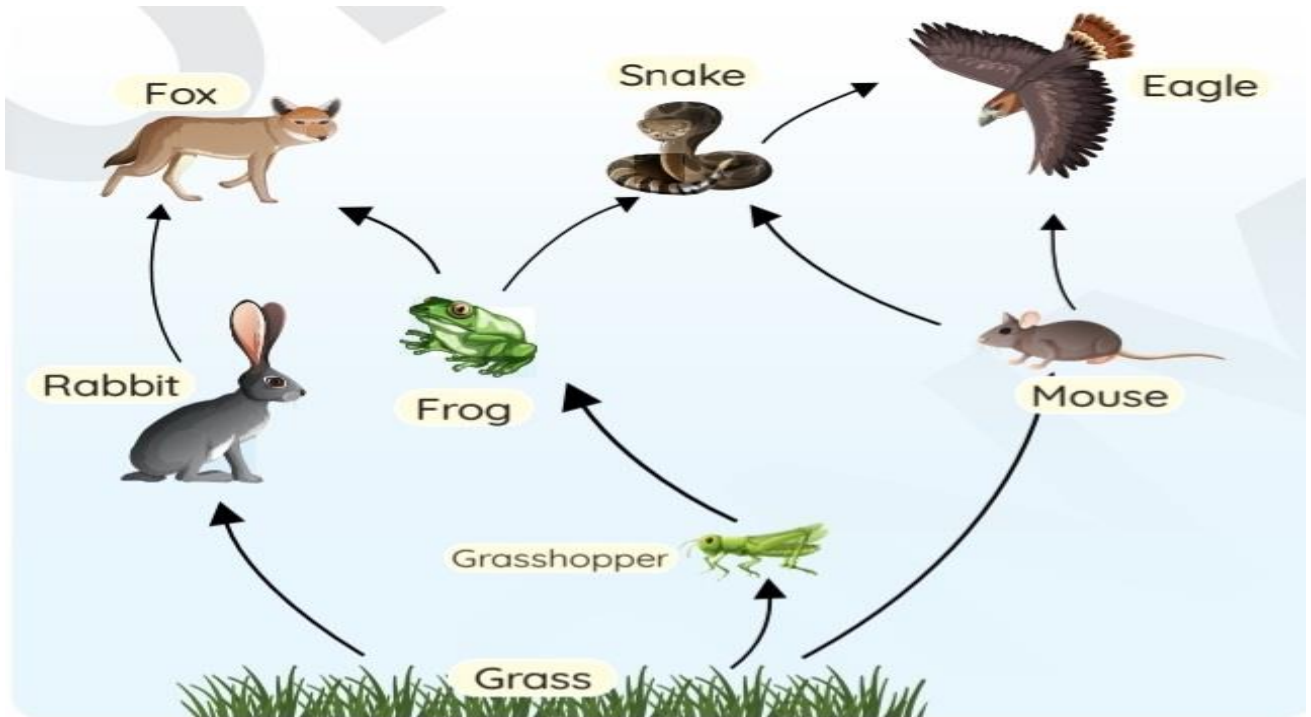


Figure (2)

1. Tool in figure (1) is used to measure **mass** and its measuring unit is **kilogram**.
2. Tool in figure (1) is used by **bakers** in their work.
3. Tool in figure (2) is used to measure **length** and its measuring unit is **meter**.
4. Tool in figure (2) is used by **architects** in their work.

Variant questions:

A) Study the following food web, then answer the questions:



➤ **From this food web, complete the following to form three food chains:**

- a. **grass → rabbit → fox**
- b. **grass → mouse → snake → eagle**
- c. **grass → grasshopper → frog → snake → eagle**

B) Study the following food web, then complete the sentences using the words between the brackets:



- a. If the population of rabbits increases, may disappear. (foxes – grass)
- b. The snake is considered a consumer. (primary – secondary)
- c. The rabbit provides energy to the (eagle – grass)
- d. If the grass is removed, the mouse and rabbit will (migrate – die)

C) Study the following food web, then complete the sentences using the words between the brackets:

a) Letter (**E**) represents the producer.

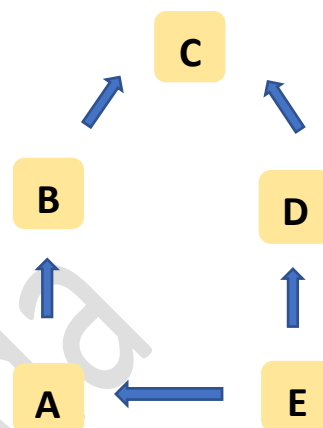
(A – **E**)

b) Letter (B) represents the
consumer.

(primary – **secondary**)

c) Letter (C) is the tertiary consumer
when it feeds on letter (**B**)

(**B** – D)



D) Study the following figure, then answer the questions:

a. What is the name of this phenomenon?

Coral bleaching

b. Is this a healthy ecosystem? **No**

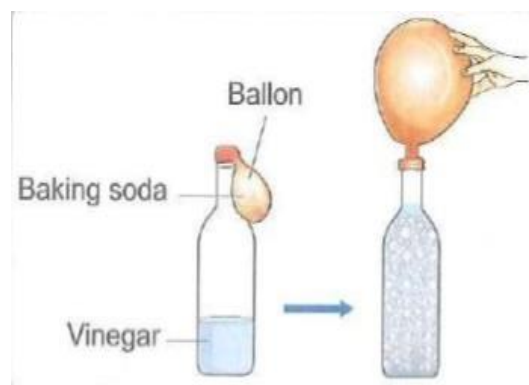
c. What is the reason of this phenomenon?

Increasing the temperature of water.



E)As shown in the diagram, the balloon inflates when the baking soda in the balloon is mixed with vinegar. What does cause this to happen?

Because mixing vinegar with baking soda produces gas bubbles which cause inflating of the balloon.

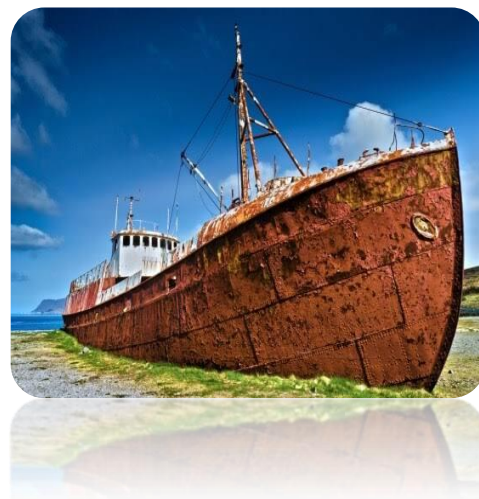


F)Ships body which are made of iron exposed to damage due to a type of change that you are studied.

1. What is the type of change that takes place?

Chemical change.

2. When iron reacts with **oxygen** and **water**, the body of ship loses its shining as a result of iron **rusting**.



G)Look at the following figure, then choose the correct answer:

a. The number which represents filtration process is

(1 - 2 - 3 - 4)

b. The number which represents evaporation process is

(1 - 2 - 3 - 4)

c.The number which represents the drinkable water is

(1 - 2 - 3 - 4)

d.The number which represents the water that contains very big amount of salt and minerals is

(1 - 2 - 3 - 4)

